

Maturity Mismatch and Financial Crises: Evidence from Emerging Market Corporations*

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Abstract

Substantial attention has been paid in recent years to the risk of maturity mismatch in emerging markets. Although this risk is microeconomic in nature, the evidence advanced thus far has taken the form of macro correlations. We evaluate this mechanism empirically at the micro level by using a database of over 1500 publicly traded firms from fifteen emerging markets, with special focus on Latin America and East Asia. While East Asia corporates have tended to issue more debt at short maturities than their Latin American counterparts, we show that this is generally matched by greater holdings of liquid assets. As a result, the distribution of net short-term exposure is remarkably similar across regions. We attempt to measure the risk of such exposure by estimating, at the firm level, the effect on investment of short-term exposure under capital-account volatility. For the whole sample and in both regions individually, this effect is (statistically) zero, contrary to the prediction of the maturity-mismatch hypothesis. This conclusion is robust to using a variety of different estimators, alternative measures of capital flows, and controls for devaluation effects and access to international capital.

Keywords: maturity mismatch, investment, financial crises

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I Introduction

The risk of “maturity mismatch” for emerging-market firms has received considerable attention in recent years. Although business assets are (stereotypically) installed for the long term and therefore illiquid, capital-market frictions and distortions may induce firms to issue debt with relatively short maturity. Should aggregate credit conditions shift suddenly, these same firms, unable to renew their debt, might have to curtail investment and perhaps liquidate. On the aggregate level, entire economies may be at risk of an investment collapse in the event of a capital-account reversal. Proponents of this view include Radelet and Sachs (1998) and Chang and Velasco (1999), who argue that excessive reliance on short-term debt leaves emerging-market corporations vulnerable to “financial panic” as in the stylized model of Diamond and Dybvig (1983).

These discussions were largely inspired by the financial crises that affected East Asia and Latin America in the 1990s. The idea took on particular poignancy in reference to the emerging markets of Asia, where the corporate sector was highly leveraged leading up to the crisis, and that much of this indebtedness was at the short term.

That such a scenario is logically possible is by now beyond doubt. That such a mechanism is of quantitative importance, however, remains an empirical question. Unfortunately, the “macro” observation that crises occur with greater frequency in economies that have more short-term indebtedness does not constitute sufficient evidence. “Weaker” economies and those exposed to larger shocks may in equilibrium issue debt at shorter durations. Moreover, in equilibrium, capital flight will almost mechanically be associated with a decline in investment, but it will not necessarily be the ultimate or even the proximate cause.

Instead, we examine this mechanism at the micro level by examining the behavior of corporate investment. This analysis involves comparing firms that face the same shift in aggregate credit conditions, but differ in their potential exposure. According to the maturity-mismatch hypothesis, firms with excessive short-term debt should suffer most from the aggregate capital outflow.

We assemble a database with accounting information (including the maturity composition of liabilities) for approximately 1500 publicly traded non-financial firms in emerging markets. The countries represented in this sample consist of five East Asian countries (Indonesia, Malaysia, Philippines, South Korea, and Thailand), seven Latin American countries (Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela) and three additional emerging markets (Israel, South Africa, and Turkey) as a comparison group. These data cover some of the largest emerging markets

for 1990's, a period of substantial capital-account volatility for most of these countries. In addition, there are firms in our sample that hold substantial amounts of short-term debt. These elements constitute the two ingredients necessary for examining the proposed mechanism. The choice of publicly listed firms is determined exclusively by the availability of accounting data. Moreover, we concentrate on the non-financial sector of the economy, as it is here that investment decisions are ultimately carried out.

The specific empirical strategy is to assess whether firms with more short-term exposure invest less in the aftermath of capital flight. We do so by estimating reduced-form equations for investment. The proposed mechanism centers on the interaction of short-term indebtedness with capital flows, and so the key variable in the analysis is

$$(\text{Short-Term Exposure})_{i,t-1} \times (\text{Capital Flows})_t$$

for firm i at time t . This analysis allows us to better understand whether the marginal peso of debt is allocated in such a way as to generate the large risk suggested by the maturity-mismatch hypothesis. The hypothesis is that we should estimate a strong and positive effect of this interaction.

The main empirical result is that the investment response of relatively short-term-exposed firms to aggregate capital flows is statistically indistinguishable from that of firms that hold predominantly long-term debt. This finding is robust to the inclusion of controls for preexisting firm differences as well as to the interaction of these controls with aggregate macroeconomic variables. We find this non-result in spite of the strong prediction of the maturity-mismatch hypothesis: that firms with more short-term debt should invest substantially less following an episode of capital flight. This non-result plays out at the regional level as well: no significant, robust effect is found among East Asian or Latin American corporations. Moreover, we show that the finding is not sensitive to using a variety of different estimators, alternative measures of capital flows, and controls for devaluation effects and access to international capital.

Note that we do not claim that capital flight is not associated with investment collapses. Indeed, in these data, there is a strong, positive correlation between the two. Instead, we find that capital outflow does not differentially affect firms with different maturity structures of debt. Moreover, the lack of any such relationship, we argue, indicates that this "maturity mismatch" channel may simply not be of quantitative importance for these firms in this period.

The rest of the study is organized as follows. Section II presents a description of the data employed, while more detailed information on data sources is contained in the Appendix. Section III

contains the main empirical results for investment. In Section IV, we present sensitivity analysis for the relationship between debt maturity and investment as a function of aggregate capital flows. An analysis of the behavior of financing is found in Section V. Section VI concludes.

II Data and Descriptive Statistics

II.A Construction of the Sample

This section describes our sample and variables. The principal source for the data employed in this data is Worldscope, a database of firm-level accounting information which has been input from the annual reports and corporate filings of mainly publicly traded firms. Our sample consists of non-financial corporations in 15 emerging markets. The data contain accounting information from as far back as 1980 and from as recent as 2001, but the bulk of our sample is from the decade of the 1990s. Table 1 shows the number of observations per country and year. The size of the sample changes as new firms are listed and incorporated into the database. Bankrupt or de-listed firms are not removed from Worldscope, and we track their eventual disposition (see below). For our estimates, we use a sample restricted to the non-financial firms for which maturity-composition data is available.

We group the sample based on three broad categories. First, there are firms from five East Asian countries: Indonesia, Malaysia, the Philippines, South Korea, and Thailand. Second, we include data on corporations from seven countries in Latin America: Argentina, Brazil, Colombia, Chile, Mexico, Peru, and Venezuela. Finally, for comparison purposes, we also include in our dataset information from three additional emerging markets: Israel, South Africa, and Turkey.

Throughout the analysis, the main dependent variables are the various components of investment. The first is investment in fixed capital, which is measured as expenditures of fixed assets. The second, investment in inventories, is defined as the change in inventories in a given period. Inventories include raw materials, work in progress and finished goods. The third measure of investment is the (revenue generated from the) disposal of fixed assets. The first and third variables are detailed in the cash flow statement. We opt not to use the change in net fixed assets as a measure of investment because accounting standards in some of the countries in our sample allow for arbitrary revaluations of assets, making it impossible to separate investment from (endogenous) changes in the accounting valuation of capital goods.

Each investment variable figures into the analysis in distinct ways. We investigate the response of purchases of fixed capital to better understand how the proposed mechanisms might affect the productive capacity of the firm in the medium term. On the other hand, it has also been argued that falling net worth not only affects the supply of long-term credit for investment, but it also affects the availability of short-term working capital. A shortage of working capital reduces the firm's capacity to purchase intermediate goods and pay for variable factors of production, leading to a reduction in output. To explore this channel, we also examine the behavior of inventory investment. Finally, financial crunches might oblige firms to engage in "fire sales" on their assets, a behavior that should be captured partly by the disposal of fixed assets. Columns 5–7 of Table 2 contain summary statistics for these investment variables for each country in the sample.

In addition, the database contains other key information about the firm, such as its main products, sectors of operation, ownership structure and a history of the main corporate events.

The main explanatory variable is short-term exposure, which is the difference between current liabilities and current assets. Current liabilities includes all liabilities coming due in the upcoming fiscal year. This measure includes debt issued at short maturities as well as long-term issuances whose terminal date falls in the upcoming year. Current assets include highly liquid instruments such as cash as well as holdings that are normally liquidated rapidly, such as inventories and other intermediate goods. These variables plus total liabilities are summarized in Columns 1–4 of Table 2.

It should be noted that we do not know the currency composition of the debt. The question of the interaction of maturity and currency mismatches during a crisis is explored by Bleakley (2003). In a sample of Latin American firms, the omission of currency composition of debt is found not to affect the conclusions regarding the effects of short-term exposure. Moreover, we show below that the results are not driven by failing to control for interactions with the exchange rate.

The original accounting data are then modified in four ways:

1. We inflate all data to 2002 values using December-December changes in the consumer price index, and convert them to US dollars using the market exchange rate for December of 2002.
2. In the event of a merger, a spin-off or a split, we construct an artificial firm that contains all of the component firms for the entire sample period. In the cases in which information on all component firms is not available we drop the firm from the sample. Worldscope provides information on the reasons for which accounting data is no longer updated on all firms. We use this information to build our artificial firms.

3. In the event of bankruptcy, we assume that existing capital is liquidated and impute investment values equal to the lagged fixed capital stock in the following period.
4. We drop all firm/year observations if the accounting data is not self consistent. In particular, we drop observations if short-term liabilities exceed total liabilities or if accounting variables do not accord with sign conventions. This results in the deletion of 506 observations.
5. We compute the logarithmic change in total assets and construct a z-score using the sample mean and standard deviation. We drop 106 firm/year observations that have $|z| > 6$. In addition we construct z-scores for all dependent and independent variables and drop those observations for which $|z| > 6$.

Note that our results are robust to changes in the treatment of bankrupt firms, changes in the criteria for dropping outliers and in changes in the treatment of firms involved in a merger, a spin-off or a split. Appendix B reports these robustness tests in detail.

Finally, the main macroeconomic variable employed in the present study is the net capital account, expressed as a percentage of lagged GDP. These flows exhibit substantial variability in this period, and are prone to large movements, especially during crisis episodes such as the “Tequila crisis” or the “Asian flu”. (Please see the Data Appendix for more details on the data series.) The country-level macro data is then merged with the firm data. Firms are mapped to countries on the basis of where their stock is traded. Additional macroeconomic variables are described in the text as they are introduced.

II.B Graphical Evidence

Several of the pertinent contrasts—and similarities—between the East Asia and Latin America are evident in Figure 1. This figure displays kernel estimates of the probability density functions of four variables central to the present study: the fraction of liabilities due in the upcoming year, the fraction of assets that are “current”, the ratio of liabilities to assets, and the net short-term exposure. The density estimates for the Asia sample are represented by a solid line, and the estimates for Latin America are displayed as a dashed line.

The density estimates for debt maturity and overall leverage confirm the convention wisdom about the balance-sheet deficiencies of East Asian corporations. In Panel A of Figure 1, we graph the ratio of short-term to total liabilities. We see a marked difference between the regions on this

measure. While the Latin American distribution is roughly bell shaped and centered around six tenths, the East Asia is shifted to the right (*i.e.*, shorter term). Indeed, the mode of the Asia density is almost at one (100% short term). Similarly, East Asian corporations tended to have substantially greater liabilities than their Latin American counterparts, as seen in Panel C.

However, when we combine this with the other side of the balance sheet, the Asian situation seems less dire. Of note in Panel B of Figure 1 is that the distribution of current (*i.e.*, short term) assets for East Asian corporates was also shifted to short end, relative to Latin American firms. To assess maturity structure on both sides of the balance sheet, we take the difference between short-term liabilities and current assets, which we call short-term exposure. The regional density estimates of this difference are displayed in Panel D. The Asia distribution does not exhibit the rightward shifting seen in the case of short-term liabilities. Indeed, the densities from both regions align very closely.

The regional similarity in the distribution hardly dispels preoccupations about the risk of short-term exposure. Credit markets in either region may not be robust enough to transfer capital from the lower to the upper tail (of Panel D) in a crisis. Moreover, this could be exacerbated for Asia by the fact the distribution of short-term exposure is a bit more spread out in East Asia than in Latin America. On the other hand, the shocks to capital markets in East Asian may have placed a greater penalty on short-term exposure. With these uncertainties in mind, we set out to measure the effects of short-term exposure below.

III Investment Regressions

In this section, we examine the “maturity mismatch” hypothesis and find it lacking. We fail to find robust differences in the investment behavior among firms with very different levels of potential exposure to the flight of capital from the country. Specifically, we propose and implement a simple regression equation that allows for the estimation of differential responses to capital flows by firms with different maturity structures of their balance sheet. In almost every case, we find that this relationship is not significantly different from zero, and in no case do we find a robustly significant effect.

III.A Empirical Methodology

The central empirical question of this study is how the change in domestic credit interacts with the maturity structure of firms' balance sheet to alter investment behavior. Therefore, the key explanatory variable in the analysis is the interaction of firm i 's lagged short-term exposure, $exp_{i,t-1}^{ST}$, with aggregate (net) capital flows, Δk_{jt} , into country j at time t . (In what follows, we abbreviate this second-order term as $(exp^{ST} \times \Delta k)$ for brevity.) The prediction of the maturity-mismatch hypothesis is that firms with more short-term debt should invest less following an episode of capital flight. Since an outflow is defined negatively, this implies a strongly positive coefficient on $(exp^{ST} \times \Delta k)$. (The exception being for the disposal of capital, for which we expect a negative relationship.)

In addition to the interaction, we include terms that control for the first-order effects of balance-sheet variables and macro conditions. Including the main effect of short-term debt absorbs any pre-existing differences among firms with different levels of short-term indebtedness. Such differences might have prevailed in the absence of movements in the capital account, *e.g.*, if expanding firms were more likely to issue short-term debt than stagnant ones. (Below, we refer to lagged short-debt exposure mnemonically as (exp^{ST}) .) The macro main effect, usually a fixed effect for country \times year, captures the macroeconomic changes that may impact all firms in the economy without regard to the maturity composition of their balance sheet.

The basic specification (for firm i in country j at year t) that results is

$$I_{ijt} = \beta(exp_{i,t-1}^{ST} \times \Delta k_t) + \delta_{jt} + \gamma exp_{i,t-1}^{ST} + \epsilon_{ijt} \quad (1)$$

in which I_{ijt} is a measure of investment. This equation can be easily estimated using Ordinary Least Squares (OLS) on the accounting data described above. To equation 1, we also add additional firm- and macroeconomic control variables. For example, we typically include a control for lagged total debt and current assets, as well as their interactions with the capital flow. Other examples are detailed below.

III.B Results for Whole Sample

In our sample, the investment behavior of relatively short-term-exposed firms following capital flight is statistically indistinguishable from that of firms that hold predominantly long-term debt. We employ the empirical methodology detailed above, and pay particular attention to the estimated

coefficient on the interaction of lagged short-term debt and capital flows, $(exp^{ST} \times \Delta k)$. We generally estimate this coefficient to be insignificantly different from zero: i.e., approximately the same response of investment by “short-term” and “long-term” firms to aggregate capital flows.

This result can be seen in Table 3, which contains estimates of equation (1) and variants. Columns (1), (4), (7), and (10) show the estimate of the simplest equation, a specification that consists exclusively of $(exp^{ST} \times \Delta k)$, the first-order effect of lagged short-term debt, and country \times year fixed effects. Columns (2), (5), (8), and (11) add leverage and current assets as controls and as interactions with the capital flows. Finally, in Columns (3), (6), (9), and (12), the specification also includes a lagged dependent variable as an independent regressor. We estimate the effect on current-year investment in Panel A, whereas Panel B contains results for investment for the following year as the dependent variable. (Note that all the micro-level variables are lagged one year, so “current year” means contemporaneous with the macro variable.) We review the results for each type of investment in turn in the following paragraphs.

First, the interaction of short-exposure and capital flows is not a robust determinant of capital expenditures. The basic result for capital expenditures are the most favorable to the maturity-mismatch hypothesis. In Column (1), we see that the OLS estimation of equation (1) without additional controls yields a positive and significant coefficient on $(exp^{ST} \times \Delta k)$. However, this is not robust to the inclusion of additional balance sheet data or of the lagged dependent variable. We also estimate a positive correlation between short-term exposure and investment in Column (1). When total debt and its capital-flow interaction are both added to the regression (shown in Column (2)), the first-order effect of (exp^{ST}) is no longer significant.

Second, $(exp^{ST} \times \Delta k)$ is not a robust (or correctly signed) determinant of the disposal of fixed assets. The more parsimonious specifications yield significant, positive estimates of the effect of $(exp^{ST} \times \Delta k)$ on asset sales. However, this effect is weaker upon inclusion of a lagged dependent variable. In any case, since we expect more asset disposal by short-term-exposed firms when the capital account is negative, the initial results have the apparently incorrect sign. This raises a possible limitation of the accounting data: sales of assets measure price \times quantity. If financially distressed are forced into holding “fire sales” of their assets, the response of price might exceed the response of quantity. To be sure that our results are not contaminated by price effect, we also examine the extensive margin of disposal.¹ These results are located in Columns (7) through (9)

¹Approximately fifty percent of the firm/year observations are characterized by some sales of fixed assets.

of Table 3. We find no robust and significant effect of $(exp^{ST} \times \Delta k)$ on the probability that a firm sells fixed assets.

Third, the coefficient on $(exp^{ST} \times \Delta k)$ is insignificantly different from zero in all specifications for inventory investment. This result is peculiar since the inability to renew short-term debt should restrict firms' working capital particularly. Firms apparently do not run down inventories in order to make up this gap. On the other hand, the interaction of current assets with capital flows is estimated to be significant, but with a puzzling sign (more liquid assets should be good in the face of capital flight).

Furthermore, we argue that these tests most likely do not suffer from a lack of statistical power due to noisy firm data. One could argue that poor accounting standards introduce substantial noise into these measures. On the other hand, a common argument is that poor standards introduce not noise, but systematic biases such as exaggeration of profits. Either way, it is clear from the results that accounting variables, in first-order form, are significant predictors of the various investment variables. This indicates that the data are not so error prone. It is only when we look for interactions of short-term exposure with macro shocks that we generally do not find significant effects.

III.C Regional Comparisons

The non-effect of short-term exposure from above is seen in our regional analysis as well. Table 4 contains regression results for each region and for each investment variable. The regression specification is as in Column (3) of Table 3, with a lagged dependent variable and with total liabilities and current assets entering in first-order form and as interactions with the net capital account. In no case do we estimate a significant (and correctly signed) effect of $(exp^{ST} \times \Delta k)$ on investment.

Regional differences do emerge on some of the other interactions. Using the samples from Latin America and from the comparison emerging markets, we estimate all of interaction effects to be insignificantly different from zero for current investment. On the other hand, several interaction terms are estimated to be significantly different from zero for the East Asian sample. The interaction of current assets with capital flows has roughly equal and opposite effects on capital expenditures and inventory investment. While the net effect is a statistical zero, it is noteworthy that some sort of shifting is apparently induced by $(exp^{ST} \times \Delta k)$. We also estimate a significant, positive effect of the interaction between liabilities and capital flows for several types of investment.

IV Sensitivity Analysis

The result from above is not sensitive to a wide variety of changes in the econometric specification, as we show in this section. These alternative specifications include using different estimators and alternative measures of capital flows. Further, we show that the result for $(exp^{ST} \times \Delta k)$ is robust to the inclusion of control variables for access to external capital and changing relative prices.

IV.A Alternative Estimators

We estimate the effect of $(exp^{ST} \times \Delta k)$ using numerous alternative estimators, all of which deliver similar estimates of $(exp^{ST} \times \Delta k)$ to those above. These new results are seen in Table 5 and described in this subsection.

We begin with alternative computations for the standard errors using the ordinary least-squares (OLS) estimator. These estimates employ the specification from Table 3, Column 2, which includes first-order and capital-flow-interaction effects of short-term exposure, total liabilities, and current assets. Each Panel displays only the estimates on $(exp^{ST} \times \Delta k)$. (Note that the point estimates do not change in Panels A-D, only the standard errors.) Panel A contains the basic OLS standard errors, *i.e.*, assuming no heteroskedasticity and no intraclass correlation. Panel B reports Huber-White (“robust”) standard errors that allow for heteroskedasticity. (These are the default throughout the present study.) Panel C allows for corrects the errors for the presence of correlated disturbances across firms within each country \times year cell. Finally, when computing the standard errors, the estimator in Panel D allows for fairly generic correlational structures within firm. The size of the standard errors generally increases as we read down the Panels, but the pattern of significance is essentially the same.

These results are essentially unchanged if we add a one-period lag of the dependent variable. These estimates of the effect of $(exp^{ST} \times \Delta k)$ are shown in Panel E (which replicates parts of Table 3). This provides a useful check for the above estimates insofar as firms experience persistent shocks.

When we control more flexibly for the predetermined variables, very little changes in our estimates. Above, we use linear terms to control for the first-order effects of the lagged accounting variable ((exp^{ST}) , total debt and current assets). In Panel F, we allow the effects of the predetermined accounting variables ((exp^{ST}) , total debt, current assets) to be highly flexible by including them as polynomial of order ten. In effect, we are parametrically matching firms based on their

$t - 1$ characteristics. The estimates are qualitatively similar using this technique, with the major exception that the anomalous result for the disposal (sale) of fixed assets is no longer significantly different from zero.

Controlling for firm-level fixed effects does not generate estimates that favor the maturity-mismatch hypothesis. In Panel G, we add firm-specific effects to the specifications. Similar estimates are obtained, except for the contemporaneous response of capital expenditures to $(exp^{ST} \times \Delta k)$ (for which the estimate is significant but opposite of the expected sign). We combine the matching estimator with firm fixed effects in Panel H, and find uniformly insignificant effects of $(exp^{ST} \times \Delta k)$ on all the studied investment outcomes. This includes an insignificant result for expenditures (versus Panel G, Column 1) and for disposal (versus the majority of the Panels above).

Finally, the addition of an autocorrelated error term yields substantially similar results. We allow for an autoregressive error of order one (AR(1)) at the firm level in the estimation of the fixed-effects model. These results are found in Panel I. The estimated standard errors tend to be larger than those found above, and the point estimates are similar. Consequently, none of the estimates of $(exp^{ST} \times \Delta k)$ are significantly different from zero.

IV.B Alternative Measures of Capital Flows

In this subsection, we estimate the effect of $(exp^{ST} \times \Delta k)$ using interactions of exposure with various alternative macroeconomic variables.

We start by looking at the differential effects on firm level investment of capital inflows net of foreign direct investment (FDI). We exclude foreign direct investment to control for the possibility that “fire sale FDI” takes place during balance of payment crisis or aggregate liquidity shocks. So far we have associated an international liquidity shock with low foreign investment and the exiting of investors from the crisis economy. However, a liquidity crisis could also be consistent with an inflow of foreign capital, in the form of mergers and acquisitions (M&A), that seeks to take advantage of profitable investment opportunities in the hands of cash-strapped domestic corporations². We report these results in Panel B of Table 6. As in our baseline specification, we fail to find a significant differential effect of short term exposure on the response of investment to capital flows.

Many of the capital flow reversals in our sample coincide with periods of high domestic interest rates, a result of dogged defenses of the exchange rate by domestic monetary authorities. The

²Aguiar and Gopinath (2002) find that there was a substantial increase in M&A activity in South East Asia between 1996 and 1998. See also Krugman (1998).

result is that firms wishing to roll-over short term liabilities are restricted by the lack of both international and domestic liquidity. To capture this effect we introduce a measure of shocks to the supply of domestic credit in our investment specifications. Because data on interest rates is patchy, and has the added complication of having to separate real rates from expected inflation, we proxy local credit conditions using the change in domestic credit over lagged GDP. We start by estimating our baseline specification and replacing net capital inflows with changes in credit. The results of this estimation are reported in Panel C. Next, in Panel D, we include both the interaction of exposure with capital inflows and changes in private credit. In all cases we fail to obtain coefficient estimates on the $(exp^{ST} \times \Delta k)$ interaction that are statistically significant.

As an additional test of the robustness of our main results, we repeat the specifications reported in the previous three panels normalizing the measures of capital flows and changes in private credit to zero mean and unit standard deviation. The results (reported in Panels E through G of table 6) are qualitatively identical to the results presented in Panels A through C.

Finally, in Panels H and I we report the estimated coefficients on the interaction between exposure and the spread over US T-Bills of the JP Morgan EMBI bond index. Panel H uses the country specific spread (when available), while Panel I uses the aggregate EMBI spread, which should be taken as a proxy of financing conditions for emerging markets in general. In both cases the sample size drops: in the first case because EMBI data is only available for a sub-sample of countries, in the second because data is only available after 1991. Consistent with our previous findings we fail to find a significant negative coefficient on any of the interactions between exposure and either of the EMBI spreads.

Could it be that the relationship between capital inflows and short-term exposure is non-linear, so that it is only in periods of low inflows (or capital-flow reversals) that exposed firms fare worse than their counterparts? We explore this question in the rest of Table 6.

We start with an indicator variable for periods in which capital inflows are below the country median over the period 1985-02 (*low* inflows). In Panel J we interact this indicator variable with short term exposure, while in Panel K we interact the indicator variable with $(exp^{ST} \times \Delta k)$, thus allowing for an asymmetrical effect of capital inflows. The next two panels replicate this exercise, but define the indicator dummy with respect to the country mean minus one standard deviation (*crisis* inflows). For most investment variables (current and next period) we obtain statistically insignificant coefficients for the interactions of short term exposure with the dummy variables and

for the two interactions of exposure with net capital inflows. One exception are the capital disposal variables, where we systematically find that firms with higher short term exposure sell more fixed assets in periods of low capital inflows and in periods of high inflows. A possible interpretation of this asymmetry is that firms renew their capital stock in periods of high inflows and liquidate because of financial distress in periods of low inflows.

The last three panels of Table 6 interact short term exposure with variables based on changes in net capital inflows. Panel N introduces the changes directly, Panel O builds a dummy variable for drops in capital inflows ($\Delta k < 0$) and Panel P reports the results of using the Calvo et al (2004) sudden stop dummy. Sudden stops are defined as large capital reversals (Δk below the mean minus 1 standard deviation) that are accompanied by falling output levels. This last condition attempts to separate financing shocks from terms-of-trade shocks. As in the previous panels we obtain some positive coefficient estimates for the disposal of fixed assets when we use the capital inflow drops dummy, although these results do not hold for the case of the Calvo et al sudden stop dummy. For capital expenditures and inventory investment we fail to find a differential effect across firms with different levels of maturity exposure.

We consider investment behavior around particular episodes of capital-account reversals and fail to find a significant effect of short-term exposure following capital flight.. Table 7 shows the result of estimating the differential effects of the Calvo et al (2004) measure of sudden stops using a slightly different approach. Instead of pooling the whole sample, we concentrate on the fall in investment in the vicinity of the sudden stop episodes. To do so we run a series of regressions in which we include observations on firm investment from $t - 1$ (the period prior to the sudden stop) and either t , $t + 1$ or $t + 2$. Note that each regression has observations from only two periods. The key variable in this specification is the interaction between the post dummy (which takes on a value of one in t , $t + 1$ or $t + 2$) and short term exposure. For this specification, we expect a *negative* coefficient estimate on $((exp^{ST}) \times Post)$ in the capital-expenditure and inventory regressions, and positive signs in the asset-disposal equation. In addition, the even numbered columns include interactions between the post dummy and lagged liabilities over lagged assets and between the post dummy and lagged current assets over total assets.

We find that, following a sudden stop, the behavior of capital expenditures in firms with high exposure is, in almost all cases, statistically indistinguishable from the behavior of firms with low exposure (columns 1–6). This result holds for the full sample, for sudden stop episodes in Asia and

for those in Latin America. The only $((exp^{ST}) \times Post)$ coefficient which is statistically significant in both specifications is that for period $t + 2$ in Latin America, however, the estimated coefficient is the opposite sign to what we expected. In turn, for inventory investment, disposal of fixed assets and the disposal dummy, either the coefficients on $((exp^{ST}) \times Post)$ become insignificant once the additional controls are included, or the estimated coefficients have opposite signs to what we expected.

All in all the results presented in this subsection confirm our main results: we fail to find significant, robust differences in the response of investment to international liquidity shocks across firms with different levels of short-term exposure.

IV.C Additional Controls

Even though episodes of capital flight are times in which relative prices change markedly, we argue that this is unlikely to contaminate our results. To a first approximation, this should load onto the macroeconomic variables (not the interaction terms) since all the firms in the economy face these same price changes. On the other hand, firms with more (exp^{ST}) might face differential changes in prices, a hypothesis we consider (and discard) in this subsection.

One possibility arises because changing credit-market conditions presumably have effects that work through channels other than (exp^{ST}) . If short-term-exposed firms also have differential access to international (or domestic) capital, then our results may come from having omitted this “access” variable in the estimates of investment responses to capital flows. We assess this hypothesis in Table 8 by constructing proxies for capital access and controlling for them (interacted with Δk) in the investment regressions. In Panel A, we interact whether the firm had an ADR account in year $t - 1$ with subsequent capital flows. There mixed evidence on the effect of this interaction, but its inclusion does not materially alter the estimates of $(exp^{ST} \times \Delta k)$. Similarly in Panels B and C, respectively, we control for the firm having an active listing in the local stock market, or a cross listing elsewhere. Again, the crucial new control is the interaction of these dummies with the capital account. As with the ADRs, when we include these controls the estimates of $(exp^{ST} \times \Delta k)$ change very little. A credit crunch might also have a greater impact on smaller firms. However, the inclusion of controls for firm size hardly changes the result for $(exp^{ST} \times \Delta k)$, as seen in Panel D. Finally, we include interactions of industry (SIC1) dummies with the net capital account. As seen in Panel E, we obtain similar estimates of the effect of short-term exposure when

including these additional controls.

Another possibility is that short-term and long-term-indebted firms systematically differ in the exchange-rate sensitivity of their non-financial prices, perhaps because of differing propensities across sectors to issue short-term debt. Since the capital account and the exchange rate often move together, there is potentially an omitted variable: the change in profit opportunities resulting from the exchange-rate movement. We consider this hypothesis in Table 9. As a first approximation for measuring changing profit opportunities we include earnings (measured by EBITDA) in our baseline specification. Second, in Panel B, we include the interactions of exposure, current assets and total liabilities with changes in the real exchange rate. Next, Panel C, includes interactions between changes in the real exchange rate and 1 digit SIC dummies, while Panel D includes interactions between a dummy for exporting firms and the change in the real exchange rate. Finally, Panel E combines these last two sets of interactions in one specification. Moreover, we also find that detailed time-varying sectoral controls³ (Panel F), which do not substantially affect the coefficient estimate on $(exp^{ST} \times \Delta k)$ either.

V Financing Regressions

Short-term-exposed firms are more likely to see their liabilities increase with a capital outflow. This is consistent with the maturity-mismatch hypothesis in that more short-term exposure means more exposure to interest-rate shocks. We also find that the short-term-exposed firms did not choose (or were unable) to repay their obligations the came due during the capital outflow. Instead, they absorbed the shock by taking on higher interest and debt liabilities.

The results for the full sample are found in Table 10. In the current year (*i.e.*, contemporaneous with the capital account), there is evidence of significant effects of $(exp^{ST} \times \Delta k)$ on accrued interest obligations, but less robust evidence of an effect on total debt or new issuances of debt. In the year following the aggregate capital flow, we estimate a strong relationship between $(exp^{ST} \times \Delta k)$ and total debt. In other words, short-term-exposed firms saw significant increases in their indebtedness in the aftermath of a capital outflow from the home country. On the other hand, we do not find significant, robust effects of $(exp^{ST} \times \Delta k)$ on interest accruals or net new issuances of debt. In Table 11, we show that these effects are present principally in the Asian subsample.

³These include indicators for country \times year \times SIC1.

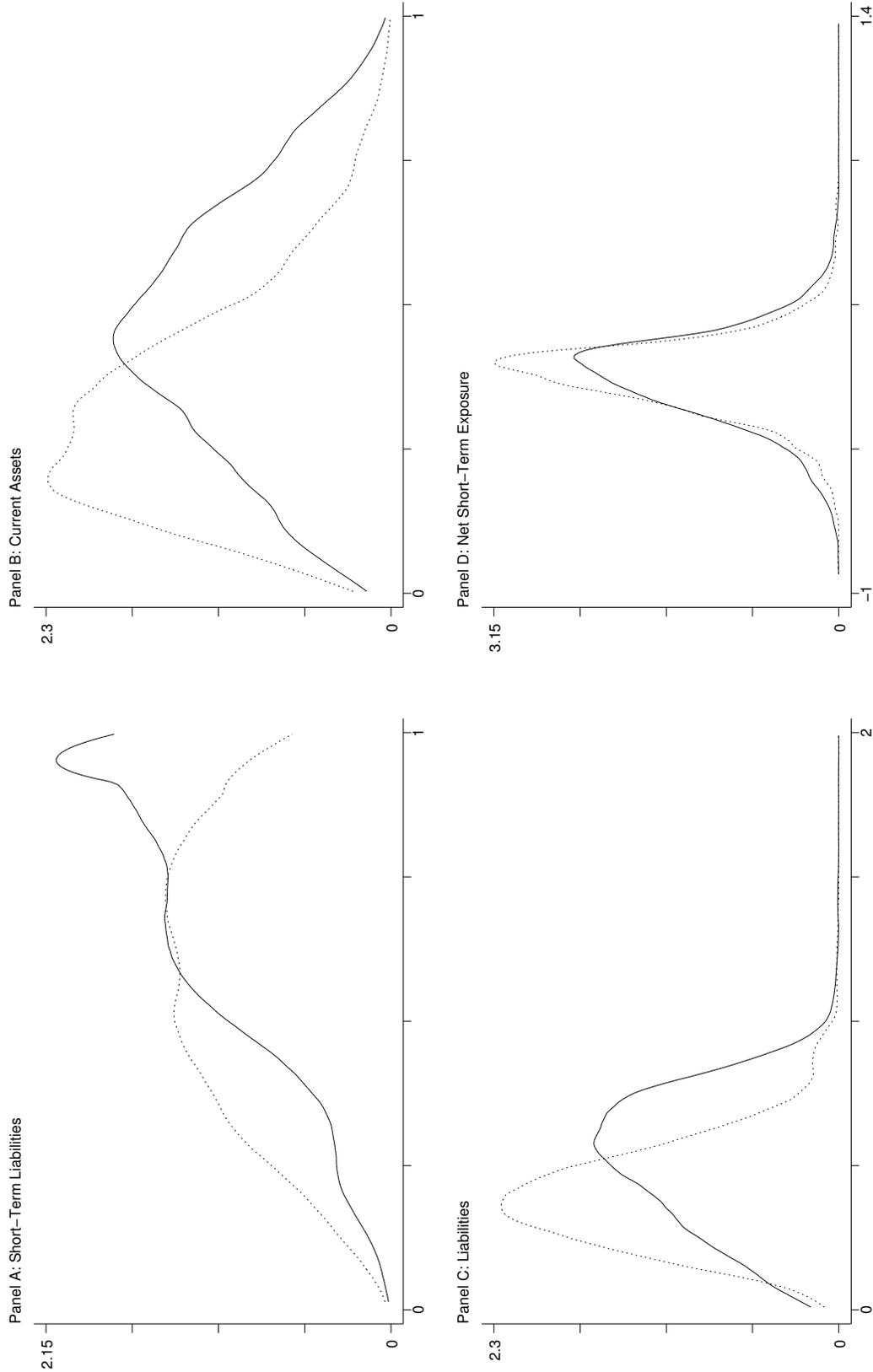
VI Conclusions

Using micro data from emerging-market corporations, we examine the response of investment to aggregate capital flows. We do not find robust and statistically significant differences in the investment response among firms with very different levels of potential exposure to the flight of capital from the country. This evidence casts doubt on the importance of corporate-level maturity mismatch in these countries.

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Figure 1: Density Estimates of Balance Sheet Variables



Notes: Each Panel contains kernel estimates of probability density functions for the indicated variables for the sample of Asia corporations, and the dashed line represents the Latin American sample. (See text for sample descriptions.) Short-term liabilities are expressed as a fraction of total liabilities. All other variables are normalized by total assets. Net short-term exposure is defined as the normalized difference between short-term liabilities and current assets.

Table 1: Sample Coverage

Principal Location of Firm	Year of Observation																				Totals for all years:
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
East Asia																					
Indonesia										2	7	67	72	77	79	103	115	120	122	114	182
South Korea	16	18	20	20	22	23	19	21	80	113	104	107	118	172	204	226	261	280	353	646	698
Malaysia	26	28	27	27	33	38	38	48	54	60	68	120	144	151	163	229	274	293	294	318	512
Philippines									4	4	7	22	32	35	37	59	68	64	63	68	112
Thailand								2	4	13	25	81	134	175	183	196	212	209	200	197	300
Latin America																					
Argentina							3	9	9	9	9	19	24	28	30	30	39	42	57	72	76
Brasil								52	56	60	59	79	82	87	103	134	135	148	172	320	311
Chile						1	3	16	19	22	24	40	42	49	56	61	67	71	96	147	143
Colombia								12	12	13	10	15	19	21	22	23	23	22	22	22	22
Mexico	17	20	22	22	27	28	29	33	33	34	34	50	63	67	74	75	78	82	116	129	124
Peru								2	3	3	3	6	17	22	17	17	28	29	35	51	60
Venezuela								1	1	3	3	6	8	9	9	10	11	10	17	23	19
Other Emerging Markets																					
Israel													22	29	29	26	32	44	48	62	88
Turkey								2	10	19	23	26	31	41	40	44	55	74	93	117	117
South Africa					74	83	81	98	115	129	127	131	128	144	149	154	152	168	357	390	341
Totals for all countries	59	66	69	69	156	173	173	296	400	484	503	769	936	1107	1195	1387	1550	1656	2045	2676	3105

Notes: Each cell indicates the number of firm observations containing valid data on short-term exposure for the previous year and valid capital-account data for the firm's home country.

Table 2: Descriptive Statistics

	Balance Sheet Variables				Measures of Investment		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Total Liabilities	Short-term Liabilities	Current Assets	Short-term Exposure (col 2)-(col 3)	Capital Expenditures	Change in Inventory Stock	Disposal of Fixed Assets
Countries:							
East Asia	0.592 (0.357) [11486]	0.397 (0.311) [11498]	0.445 (0.200) [11498]	-0.048 (0.342) [11498]	0.077 (0.119) [10187]	0.005 (0.062) [10213]	0.008 (0.023) [9016]
Indonesia	0.590 (0.333) [1161]	0.395 (0.317) [1161]	0.473 (0.207) [1161]	-0.078 (0.372) [1161]	0.097 (0.148) [1042]	0.008 (0.073) [1038]	0.009 (0.026) [1031]
South Korea	0.704 (0.340) [3870]	0.416 (0.219) [3875]	0.478 (0.177) [3875]	-0.062 (0.251) [3875]	0.071 (0.091) [3332]	0.007 (0.054) [3454]	0.011 (0.027) [2489]
Malaysia	0.494 (0.382) [3603]	0.385 (0.370) [3605]	0.441 (0.213) [3605]	-0.056 (0.388) [3605]	0.070 (0.117) [3270]	0.004 (0.067) [3229]	0.008 (0.022) [3052]
Philippines	0.445 (0.281) [621]	0.270 (0.226) [621]	0.325 (0.197) [621]	-0.054 (0.263) [621]	0.105 (0.185) [604]	0.001 (0.047) [577]	0.005 (0.022) [552]
Thailand	0.600 (0.375) [2231]	0.421 (0.357) [2236]	0.414 (0.213) [2236]	0.007 (0.396) [2236]	0.080 (0.122) [1939]	0.004 (0.063) [1915]	0.005 (0.018) [1892]
Latin America	0.458 (0.279) [5466]	0.263 (0.221) [5469]	0.332 (0.189) [5469]	-0.069 (0.248) [5469]	0.074 (0.099) [4809]	0.005 (0.046) [4944]	0.005 (0.020) [3772]
Argentina	0.439 (0.229) [524]	0.279 (0.208) [524]	0.341 (0.197) [524]	-0.061 (0.264) [524]	0.077 (0.099) [449]	0.001 (0.049) [466]	0.003 (0.015) [367]
Brazil	0.518 (0.357) [1968]	0.308 (0.278) [1971]	0.333 (0.199) [1971]	-0.025 (0.303) [1971]	0.073 (0.105) [1742]	0.006 (0.047) [1842]	0.004 (0.018) [1350]
Chile	0.379 (0.193) [968]	0.193 (0.128) [968]	0.304 (0.187) [968]	-0.112 (0.161) [968]	0.087 (0.106) [847]	0.006 (0.034) [830]	0.009 (0.025) [691]
Colombia	0.392 (0.228) [262]	0.216 (0.166) [262]	0.316 (0.191) [262]	-0.100 (0.127) [262]	0.054 (0.068) [238]	0.005 (0.048) [251]	0.008 (0.018) [216]
Mexico	0.465 (0.244) [1273]	0.250 (0.209) [1273]	0.346 (0.172) [1273]	-0.096 (0.234) [1273]	0.071 (0.092) [1106]	0.005 (0.049) [1122]	0.005 (0.019) [837]
Peru	0.439 (0.241) [336]	0.292 (0.184) [336]	0.362 (0.186) [336]	-0.070 (0.221) [336]	0.066 (0.105) [302]	0.007 (0.054) [303]	0.007 (0.024) [207]
Venezuela	0.333 (0.153) [135]	0.201 (0.108) [135]	0.303 (0.161) [135]	-0.102 (0.185) [135]	0.054 (0.061) [125]	-0.008 (0.027) [130]	0.006 (0.024) [104]
Other Emerging Markets:	0.501 (0.241) [5706]	0.367 (0.180) [5706]	0.560 (0.220) [5706]	-0.193 (0.199) [5706]	0.108 (0.134) [5303]	0.002 (0.068) [5240]	0.008 (0.022) [3859]
Israel	0.443 (0.209) [432]	0.267 (0.134) [432]	0.542 (0.240) [432]	-0.274 (0.262) [432]	0.067 (0.059) [390]	0.010 (0.053) [372]	0.007 (0.018) [309]
Turkey	0.538 (0.259) [3097]	0.402 (0.178) [3097]	0.606 (0.196) [3097]	-0.204 (0.188) [3097]	0.133 (0.154) [2804]	-0.002 (0.071) [2773]	0.003 (0.016) [2047]
South Africa	0.460 (0.219) [2177]	0.336 (0.190) [2177]	0.497 (0.246) [2177]	-0.161 (0.200) [2177]	0.082 (0.114) [2109]	0.005 (0.065) [2095]	0.015 (0.028) [1503]

Notes: Each cell contains a summary statistic for sampled firms in the indicated country or region. The top cell in each group is the mean. The middle cell (in parenthesis) reports the standard deviation, and the bottom cell [in square brackets] indicates the number of observations. Variables (listed by column) are as described in the text. Short-term exposure is the difference between current liabilities and current assets. All variables are normalized by previous-period total assets.

Table 3: Investment and Short-Term Exposure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Dependent Variables:											
Independent Variables and Regression Statistics:	Capital Expenditures			Disposal of Fixed Assets			Disposal of Fixed Assets > 0			Inventory Investment		
<i>Panel A: Dependent Variables from the Current Year</i>												
Interactions with Capital Flows:												
Net Short-Term Exposure x Net Capital Account	0.285 (0.054) ***	-0.051 (0.106)	0.014 (0.093)	0.045 (0.014) ***	0.053 (0.025) **	0.046 (0.025) *	0.197 (0.175)	-0.064 (0.387)	-0.042 (0.346)	-0.055 (0.053) *	0.001 (0.058)	0.035 (0.064)
Leverage x Net Capital Account		0.132 (0.103)	0.079 (0.084)		0.013 (0.021)	0.004 (0.022)		0.396 (0.338)	0.264 (0.304)		0.070 (0.048)	0.076 (0.054)
Current Assets x Net Capital Account		-0.251 (0.109) **	-0.18 (0.096) *		0.023 (0.022)	0.024 (0.024)		-0.140 (0.382)	-0.060 (0.350)		0.335 (0.060) ***	0.304 (0.064) ***
Controls:												
Net Short-Term Exposure	0.008 (0.003) **	-0.004 (0.005)	0.009 (0.005)	0.007 (0.001) ***	0.005 (0.002) ***	0.004 (0.002) ***	0.012 (0.010)	0.065 (0.020) ***	0.048 (0.018) ***	-0.010 (0.002) ***	0.001 (0.003)	-0.002 (0.004)
Leverage		-0.017 (0.004) ***	-0.022 (0.004) ***		0.004 (0.001) ***	0.003 (0.001) ***		-0.045 (0.016) ***	-0.049 (0.013) ***		-0.012 (0.002) ***	-0.011 (0.003) ***
Current Assets		-0.056 (0.006) ***	-0.015 (0.006) **		0.002 (0.001)	0.002 (0.001)		0.056 (0.020) ***	0.066 (0.018) ***		0.001 (0.003)	-0.003 (0.004)
Lagged Dependent Variable			0.271 (0.024) ***			0.183 (0.018) ***			0.384 (0.007) ***			-0.065 (0.014) ***
Regression Statistics:												
N	17653	17643	13942	14647	14639	11608	20102	20087	20023	17915	17903	14236
R ²	0.09	0.1	0.18	0.05	0.05	0.08	0.39	0.39	0.5	0.06	0.06	0.08
<i>Panel B: Dependent Variables from the Following Year</i>												
Interactions with Capital Flows:												
Net Short-Term Exposure x Net Capital Account	0.401 (0.088) ***	0.010 (0.162)	0.075 (0.134)	0.030 (0.012) **	0.044 (0.026) *	0.007 (0.026)	0.347 (0.173) **	0.261 (0.379)	0.302 (0.326)	-0.041 (0.037)	-0.031 (0.068)	-0.039 (0.072)
Leverage x Net Capital Account		0.220 (0.168)	0.120 (0.106)		0.002 (0.022)	0.017 (0.022)		0.184 (0.324)	-0.003 (0.280)		0.077 (0.062)	0.132 (0.064) **
Current Assets x Net Capital Account		-0.338 (0.146) **	-0.282 (0.119) **		0.008 (0.024)	0.002 (0.026)		-0.063 (0.372)	0.005 (0.327)		0.201 (0.069) ***	0.183 (0.072) **
Controls:												
Net Short-Term Exposure	0.007 (0.008)	0.003 (0.009)	0.022 (0.009) **	0.005 (0.001) ***	0.003 (0.002)	0.000 (0.002)	0.007 (0.009)	0.036 (0.018) **	0.009 (0.016)	-0.007 (0.002) ***	-0.002 (0.004)	-0.002 (0.005)
Leverage		-0.024 (0.008) ***	-0.028 (0.007) ***		0.005 (0.001) ***	0.004 (0.001) ***		-0.020 (0.014)	0.000 (0.012)		-0.006 (0.004) *	-0.005 (0.004)
Current Assets		-0.038 (0.009) ***	0.002 (0.014)		0.002 (0.002)	0.001 (0.002)		0.040 (0.018) **	0.016 (0.016)		-0.003 (0.004)	-0.006 (0.005)
Lagged Dependent Variable			0.411 (0.093) ***			0.171 (0.018) ***			0.443 (0.007) ***			-0.041 (0.018) **
Regression Statistics:												
N	14263	14257	11362	12222	12217	9862	20102	20087	20023	14425	14418	11598
R ²	0.05	0.05	0.14	0.05	0.05	0.09	0.49	0.49	0.61	0.06	0.07	0.07

Notes:

Each column reports the results of an OLS regression. The dependent variables are as indicated above each column. Estimates of the effect of the independent variables are listed in each row. Also included in each regression are indicator variables for each country-year cell. Huber-White standard errors are given in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence; double, 95%; triple, 99%. The number of observations varies because of data availability. Net short-term exposure is defined as the difference between current liabilities and current assets. Firm-level independent variables are once-lagged values. All accounting variables are scaled by the lag of total firm assets. The macroeconomic variable (net capital account) is from the current period, but normalized by lagged GDP. The accounting data are from the Worldscope database, as described in the text. Macro data are drawn from various sources. For detailed sources and descriptions, see Section 2.

Table 4: Investment Regressions by Region

Independent Variables:	Samples and Dependent Variables:											
	Capital Expenditures			Disposal of Fixed Assets			Disposal of Fixed Assets > 0			Inventory Investment		
	East Asia	Latin America	Other Countries	East Asia	Latin America	Other Countries	East Asia	Latin America	Other Countries	East Asia	Latin America	Other Countries
<i>Panel A: Dependent Variables from the Current Year</i>												
Interactions with Capital Flows:												
Net Short-Term Exposure x Net Capital Account	-0.025 (0.111)	-0.316 (0.334)	0.063 (0.665)	0.048 (0.028) *	-0.121 (0.089)	0.126 (0.150)	0.144 (0.411)	0.242 (1.017)	-1.037 (1.842)	0.028 (0.074)	-0.039 (0.221)	0.327 (0.424)
Leverage x Net Capital Account	0.182 (0.098) *	-0.061 (0.216)	-0.261 (0.460)	-0.003 (0.024)	0.075 (0.062)	-0.038 (0.108)	0.050 (0.361)	0.118 (0.762)	0.822 (1.211)	0.080 (0.061)	0.006 (0.145)	0.074 (0.223)
Current Assets x Net Capital Account	-0.276 (0.114) **	-0.134 (0.366)	-0.193 (0.480)	0.026 (0.027)	-0.102 (0.074)	0.046 (0.133)	0.204 (0.403)	-0.222 (1.049)	-0.174 (1.610)	0.280 (0.073) ***	0.313 (0.205)	0.188 (0.348)
Controls:												
Net Short-Term Exposure	0.009 (0.007)	0.033 (0.014) **	-0.013 (0.018)	0.004 (0.002) **	0.002 (0.004)	0.023 (0.006) ***	0.095 (0.024) ***	-0.030 (0.035)	-0.031 (0.056)	0.000 (0.005)	0.000 (0.008)	-0.015 (0.012)
Leverage	-0.019 (0.005) ***	-0.042 (0.009) ***	-0.006 (0.017)	0.002 (0.001)	0.006 (0.002) **	0.004 (0.004)	-0.100 (0.018) ***	0.007 (0.026)	0.103 (0.042) **	-0.013 (0.004) ***	-0.006 (0.005)	-0.007 (0.008)
Current Assets	-0.026 (0.008) ***	0.020 (0.018)	-0.031 (0.014) **	-0.001 (0.002)	0.002 (0.003)	0.019 (0.004) ***	0.117 (0.025) ***	-0.035 (0.037)	-0.015 (0.048)	-0.010 (0.005) **	0.011 (0.007)	-0.009 (0.010)
Lagged Dependent Variable	0.262 (0.032) ***	0.305 (0.053) ***	0.257 (0.050) ***	0.133 (0.019) ***	0.251 (0.057) ***	0.237 (0.046) ***	0.291 (0.009) ***	0.523 (0.015) ***	0.501 (0.017) ***	-0.043 (0.018) **	-0.090 (0.028) ***	-0.106 (0.031) ***
<i>Panel B: Dependent Variables from the Following Year</i>												
Interactions with Capital Flows:												
Net Short-Term Exposure x Net Capital Account	0.028 (0.144)	0.603 (0.529)	2.947 (2.327)	0.005 (0.028)	-0.053 (0.101)	0.377 (0.221) *	0.436 (0.389)	-0.186 (0.855)	3.580 (1.881) *	-0.022 (0.080)	-0.034 (0.362)	-1.180 (0.536) **
Leverage x Net Capital Account	0.323 (0.104) ***	-0.785 (0.407) *	-0.774 (1.378)	0.023 (0.025)	0.092 (0.068)	-0.407 (0.165) **	0.078 (0.329)	0.084 (0.607)	-1.561 (1.252)	0.132 (0.073) *	0.029 (0.253)	0.672 (0.404) *
Current Assets x Net Capital Account	-0.328 (0.123) ***	0.204 (0.548)	-0.314 (1.645)	0.001 (0.029)	-0.039 (0.084)	0.137 (0.175)	0.082 (0.377)	-0.349 (0.860)	3.070 (1.710) *	0.148 (0.079) *	0.665 (0.285) **	-0.667 (0.476)
Controls:												
Net Short-Term Exposure	0.027 (0.010) ***	0.018 (0.023)	-0.026 (0.057)	0.001 (0.002)	-0.010 (0.005) **	0.015 (0.006) **	0.050 (0.021) **	-0.043 (0.031)	-0.020 (0.048)	0.001 (0.006)	-0.002 (0.014)	-0.024 (0.016)
Leverage	-0.019 (0.007) ***	-0.019 (0.016)	-0.084 (0.056)	0.003 (0.002) *	0.009 (0.003) ***	0.005 (0.005)	-0.029 (0.015) *	0.008 (0.023)	0.092 (0.035) ***	-0.007 (0.005)	-0.001 (0.009)	0.005 (0.011)
Current Assets	-0.020 (0.011) *	0.012 (0.022)	0.019 (0.053)	-0.002 (0.002)	-0.004 (0.004)	0.014 (0.005) ***	0.041 (0.022) *	-0.041 (0.032)	0.014 (0.042)	-0.013 (0.006) **	0.002 (0.011)	-0.012 (0.013)
Lagged Dependent Variable	0.297 (0.033) ***	0.408 (0.068) ***	0.732 (0.437) *	0.151 (0.021) ***	0.154 (0.040) ***	0.233 (0.050) ***	0.370 (0.010) ***	0.523 (0.015) ***	0.522 (0.016) ***	-0.040 (0.023) *	-0.075 (0.041) *	-0.029 (0.036)

Notes: Each column reports the results of an OLS regression. The dependent variables are as indicated above each column. Estimates of the effect of the independent variables are listed in each row. Also included in each regression are indicator variables for each country-year cell. Huber-White standard errors are given in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence; double, 95%; triple, 99%. The number of observations varies because of data availability. Net short-term exposure is defined as the difference between current liabilities and current assets. Firm-level independent variables are once-lagged values. All accounting variables are scaled by the lag of total firm assets. The macroeconomic variable (net capital account) is from the current period, but normalized by lagged GDP. The accounting data are from the Worldscope database, as described in the text. Macro data are drawn from various sources. For detailed sources and descriptions, see Section 2.

Table 5: Alternative Estimators

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent Variables:							
	Capital Expenditures		Disposal of Fixed Assets		Disposal of Fixed Assets > 0		Inventory Investment	
Period for dependent variable:	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)
Independent Variables:								
	<i>Panel A: OLS, Gauss-Markov standard errors</i>							
Net Short-Term Exposure x Net Capital Account	-0.051 (0.111)	0.010 (0.216)	0.053 (0.025) **	0.044 (0.028)	-0.064 (0.378)	0.261 (0.346)	0.001 (0.058)	-0.031 (0.071)
	<i>Panel B: OLS, Huber-White standard errors</i>							
Net Short-Term Exposure x Net Capital Account	-0.051 (0.106)	0.010 (0.162)	0.053 (0.025) **	0.044 (0.026) *	-0.064 (0.387)	0.261 (0.379)	0.001 (0.058)	-0.031 (0.068)
	<i>Panel C: OLS, errors clustered on country x year</i>							
Net Short-Term Exposure x Net Capital Account	-0.051 (0.107)	0.010 (0.163)	0.053 (0.026) **	0.044 (0.023) *	-0.064 (0.501)	0.261 (0.563)	0.001 (0.052)	-0.031 (0.063)
	<i>Panel D: OLS, errors clustered by firm</i>							
Net Short-Term Exposure x Net Capital Account	-0.051 (0.120)	0.010 (0.186)	0.053 (0.026) **	0.044 (0.026) *	-0.064 (0.494)	0.261 (0.469)	0.001 (0.064)	-0.031 (0.066)
	<i>Panel E: OLS with lagged dependent variable</i>							
Net Short-Term Exposure x Net Capital Account	0.014 (0.093)	0.075 (0.134)	0.046 (0.025) *	0.007 (0.026)	-0.042 (0.346)	0.302 (0.326)	0.035 (0.064)	-0.039 (0.072)
	<i>Panel F: Matching estimator using 10th-order polynomials in the accounting variables</i>							
Net Short-Term Exposure x Net Capital Account	-0.024 (0.111)	0.069 (0.173)	0.009 (0.025)	0.014 (0.029)	-0.217 (0.397)	0.121 (0.383)	0.041 (0.061)	0.037 (0.069)
	<i>Panel G: Firm fixed effects, Huber-White standard errors</i>							
Net Short-Term Exposure x Net Capital Account	-0.343 (0.143) **	-0.323 (0.231)	0.056 (0.028) **	0.013 (0.029)	-0.337 (0.394)	0.250 (0.396)	-0.105 (0.074)	-0.114 (0.090)
	<i>Panel H: Matching with firm fixed effects and Huber-White standard errors</i>							
Net Short-Term Exposure x Net Capital Account	-0.190 (0.149)	-0.190 (0.255)	0.043 (0.030)	0.000 (0.032)	-0.132 (0.420)	0.327 (0.421)	0.055 (0.079)	0.020 (0.091)
	<i>Panel I: Firm fixed effects, AR(1) error</i>							
Net Short-Term Exposure x Net Capital Account	-0.161 (0.129)	0.125 (0.231)	0.041 (0.030)	-0.001 (0.033)	-0.029 (0.422)	0.182 (0.416)	-0.069 (0.073)	-0.125 (0.089)
Estimated AR(1) Coefficient	0.205	0.289	0.128	0.117	0.311	0.289	0.029	0.037

Notes:

Each panel presents the results from a different estimator. The dependent variables are as indicated above each column. Estimates of the effect of net short-term exposure times the net capital account are listed in each cell. Independent variables in each regression are as in Table 3, Column 2, however reporting of the rest of the estimates is suppressed. A single asterisk denotes statistical significance at the 90% level of confidence; double, 95%; triple, 99%. The number of observations varies because of data availability. Net short-term exposure is defined as the difference between current liabilities and current assets. Firm-level independent variables are once-lagged values. All accounting variables are scaled by the lag of total firm assets. The macroeconomic variable (net capital account) is from the current period, but normalized by lagged GDP. The accounting data are from the Worldscope database, as described in the text. Macro data are drawn from various sources. For detailed sources and descriptions, see Section 2.

Table 6: Alternative Macro Variables

<i>Period for dependent variable:</i>	<i>Dependent Variables:</i>							
	<i>Capital Expenditures</i>		<i>Disposal of Fixed Assets</i>		<i>Disposal of Fixed Assets > 0</i>		<i>Inventory Investment</i>	
	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)
<i>Independent Variables:</i>								
	<i>Panel A: Net Capital Account</i>							
Net Short-Term Exposure x Net Capital Account (NCA)	0.014 (0.093)	0.075 (0.134)	0.046 (0.025) **	0.007 (0.026)	-0.042 (0.346)	0.302 (0.326)	0.035 (0.064)	-0.039 (0.072)
	<i>Panel B: Net Capital Account Less Foreign Direct Investment</i>							
Net Short-Term Exposure x Net Capital Account less FDI	-0.004 (0.080)	0.046 (0.105)	0.040 (0.025)	0.012 (0.025)	0.096 (0.341)	0.155 (0.327)	0.033 (0.059)	-0.064 (0.068)
	<i>Panel C: Change in Domestic Private Credit</i>							
Net Short-Term Exposure x Change in Domestic Credit	-0.017 (0.044)	-0.027 (0.051)	0.016 (0.013)	-0.005 (0.013)	0.308 (0.190)	0.274 (0.185)	-0.029 (0.034)	-0.040 (0.038)
	<i>Panel D: Change in Domestic Private Credit and Net Capital Account</i>							
Net Short-Term Exposure x Change in Domestic Credit	-0.029 (0.053)	-0.064 (0.073)	0.002 (0.016)	0.018 (0.035)	-0.476 (0.394)	0.133 (0.106)	-0.053 (0.041)	-0.027 (0.047)
Net Short-Term Exposure x Net Capital Account	-0.043 (0.113)	0.134 (0.177)	0.042 (0.033)	-0.011 (0.018)	0.418 (0.216) *	0.143 (0.330)	0.090 (0.077)	-0.013 (0.091)
	<i>Panel E: Net Capital Account, Standardized Within Country</i>							
Net Short-Term Exposure x Net Capital Account	0.002 (0.006)	0.014 (0.010)	0.004 (0.002) ***	0.000 (0.002)	0.016 (0.019)	0.056 (0.018) ***	0.006 (0.004)	-0.004 (0.005)
	<i>Panel F: Net Capital Account Less FDI, Standardized Within Country</i>							
Net Short-Term Exposure x Net Capital Account less FDI	0.002 (0.006)	0.017 (0.011)	0.003 (0.002) *	0.001 (0.002)	0.008 (0.020)	0.035 (0.019) *	0.008 (0.004) *	-0.005 (0.005)
	<i>Panel G: Change in Domestic Private Credit, Standardized Within Country</i>							
Net Short-Term Exposure x Change in Domestic Credit	-0.003 (0.005)	-0.008 (0.007)	0.002 (0.001)	-0.001 (0.001)	0.024 (0.018)	0.040 (0.017) **	-0.002 (0.004)	-0.004 (0.004)
	<i>Panel H: Country EMBI Spread</i>							
Net Short-Term Exposure x EMBI spread	0.145 (0.064) **	0.057 (0.067)	-0.009 (0.011)	0.005 (0.017)	-0.049 (0.142)	0.176 (0.128)	-0.008 (0.021)	0.028 (0.049)
	<i>Panel I: Aggregate EMBI Spread</i>							
Net Short-Term Exposure x EMBI spread	0.046 (0.038)	-0.058 (0.049)	0.005 (0.009)	0.004 (0.009)	-0.048 (0.123)	-0.094 (0.117)	0.000 (0.025)	0.035 (0.024)

Note: Table continues on following page.

Table 6: Alternative Macro Variables (cont.)

Period for dependent variable:	Dependent Variables:							
	Capital Expenditures		Disposal of Fixed Assets		Disposal of Fixed Assets > 0		Inventory Investment	
	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)
Independent Variables:								
	<i>Panel J: Low Capital Inflow</i>							
Net Short-Term Exposure x I(NCA < Z) <i>Z=median NCA 1985-02</i>	-0.007 (0.010)	-0.006 (0.019)	-0.007 (0.003) **	-0.001 (0.004)	-0.018 (0.034)	-0.109 (0.031) ***	-0.008 (0.007)	0.006 (0.009)
	<i>Panel K: Net Capital Account: Low vs High</i>							
Net Short-Term Exposure x Net Capital Account	0.048 (0.216)	0.463 (0.379)	0.046 (0.050)	-0.040 (0.053)	0.418 (0.623)	0.996 (0.547) *	0.100 (0.127)	-0.047 (0.151)
Net Short-Term Exposure x NCA x I(NCA < Z)	-0.083 (0.314)	-0.652 (0.577)	0.009 (0.085)	0.077 (0.098)	-0.727 (0.948)	-1.484 (0.827) *	-0.123 (0.191)	0.020 (0.227)
	<i>Panel L: Crisis Periods</i>							
Net Short-Term Exposure x I(NCA < X) <i>X=(mean NCA 1985-02) - (stdev NCA 1985-02)</i>	-0.006 (0.009)	-0.010 (0.015)	-0.004 (0.003)	-0.004 (0.003)	-0.034 (0.037)	-0.060 (0.034) *	-0.011 (0.008)	0.008 (0.009)
	<i>Panel M: Net Capital Account, Normal versus Crisis</i>							
Net Short-Term Exposure x Net Capital Account	0.141 (0.156)	0.152 (0.256)	0.095 (0.036) ***	-0.028 (0.042)	0.163 (0.521)	0.781 (0.455) *	0.002 (0.099)	0.012 (0.123)
Net Short-Term Exposure x NCA x I(NCA < X)	-0.289 (0.214)	-0.077 (0.336)	-0.085 (0.062)	0.059 (0.077)	-0.356 (0.847)	-1.300 (0.743) *	0.061 (0.154)	-0.096 (0.184)
	<i>Panel N: Change in Net Capital Account</i>							
Net Short-Term Exposure x Change in Net Capital Account (DNCA)	0.051 (0.173)	0.026 (0.169)	-0.020 (0.033)	-0.045 (0.035)	-0.874 (0.425) **	-0.143 (0.395)	0.141 (0.087)	0.067 (0.097)
	<i>Panel O: Stop in Capital Outflows</i>							
Net Short-Term Exposure x I(DNCA < 0)	0.001 (0.009)	0.000 (0.014)	0.006 (0.003) *	0.003 (0.003)	0.108 (0.034) ***	0.056 (0.030) *	-0.005 (0.007)	0.005 (0.009)
	<i>Panel P: Sudden Stop</i>							
Net Short-Term Exposure x I(DNCA < Y)	-0.015 (0.014)	0.000 (0.023)	-0.004 (0.004)	0.003 (0.005)	-0.015 (0.045)	0.021 (0.041)	-0.022 (0.009) **	0.009 (0.011)

Notes:

Each panel presents the results using a different measure of capital flows. Each cell reports the results of an OLS regression. The dependent variables are as indicated above each column. Estimates of the effect of net short-term exposure times the indicated macro variable are listed in each cell. Independent variables in each regression are as in Table 3, Column 2, however reporting of the rest of the estimates is suppressed. A single asterisk denotes statistical significance at the 90% level of confidence; double, 95%; triple, 99%. The macroeconomic variables are from the current period. Net capital account and domestic credit are normalized by lagged GDP. Macro variables for Panel E-G are further normalized by country to zero mean and unit standard deviation. The accounting data are from the Worldscope database, as described in the text. Macro data are drawn from various sources. For detailed sources and descriptions, see Section 2.

Table 7: Sudden Stop Episodes

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Capital Expenditures						Inventory Investment					
Independent Variables:	(t)	(t)	(t+1)	(t+1)	(t+2)	(t+2)	(t)	(t)	(t+1)	(t+1)	(t+2)	(t+2)
<i>Panel A: Full Sample</i>												
Interactions												
Net Short-Term Exposure x Post	-0.014 (0.03)	-0.021 (0.05)	-0.024 (0.02)	0.032 (0.04)	-0.011 (0.02)	0.046 (0.04)	-0.013 (0.02)	-0.025 (0.02)	0.034 (0.02) **	-0.025 (0.02)	0.037 (0.02) **	-0.002 (0.02)
Current Assets x Post		0.008 (0.04)		0.067 (0.04) *		0.064 (0.03) *		-0.002 (0.02)		-0.096 (0.02) ***		-0.043 (0.02) **
Leverage x Post		0.022 (0.04)		-0.031 (0.02)		-0.040 (0.03)		0.023 (0.02)		0.000 (0.01)		0.023 (0.01) *
Controls												
Post	-0.009 (0.01)	-0.025 (0.02)	-0.058 (0.01) ***	-0.066 (0.01) ***	-0.067 (0.01) ***	-0.069 (0.01) ***	0.004 (0.00)	-0.008 (0.01)	-0.019 (0.00) ***	0.017 (0.01) ***	-0.006 (0.00) **	-0.003 (0.01)
Net Short-Term Exposure	0.052 (0.02) **	-0.031 (0.04)	0.048 (0.02) **	-0.032 (0.04)	0.043 (0.02) **	-0.027 (0.03)	-0.011 (0.01)	-0.002 (0.02)	-0.012 (0.01)	-0.006 (0.02)	-0.010 (0.01)	0.003 (0.02)
Current Assets		-0.127 (0.03) ***		-0.122 (0.03) ***		-0.111 (0.03) ***		0.010 (0.02)		0.008 (0.02)		0.012 (0.02)
Leverage		0.014 (0.02)		0.013 (0.02)		0.005 (0.02)		-0.005 (0.01)		-0.003 (0.01)		-0.010 (0.01)
<i>Panel B: Asia</i>												
Interactions												
Net Short-Term Exposure x Post	-0.030 (0.03)	-0.026 (0.06)	-0.037 (0.03)	0.052 (0.05)	-0.049 (0.03) *	0.055 (0.05)	-0.023 (0.02)	-0.020 (0.03)	0.039 (0.02) *	-0.026 (0.03)	0.045 (0.02) **	0.006 (0.03)
Current Assets x Post		0.020 (0.06)		0.128 (0.04) ***		0.154 (0.04) ***		0.015 (0.03)		-0.114 (0.03) ***		-0.045 (0.03) *
Leverage x Post		0.014 (0.04)		-0.034 (0.03)		-0.033 (0.03)		0.011 (0.02)		0.000 (0.01)		0.027 (0.01) **
Controls												
Post	-0.014 (0.01) *	-0.030 (0.02)	-0.068 (0.01) ***	-0.101 (0.02) ***	-0.085 (0.01) ***	-0.127 (0.02) ***	0.002 (0.00)	-0.010 (0.01)	-0.028 (0.00) ***	0.018 (0.01) **	-0.011 (0.00) ***	-0.009 (0.01)
Net Short-Term Exposure	0.077 (0.03) ***	-0.037 (0.04)	0.068 (0.03) **	-0.047 (0.04)	0.066 (0.03) **	-0.046 (0.04)	-0.007 (0.02)	-0.004 (0.02)	-0.012 (0.02)	-0.010 (0.02)	-0.009 (0.02)	0.000 (0.02)
Current Assets		-0.169 (0.04) ***		-0.172 (0.04) ***		-0.171 (0.04) ***		0.002 (0.02)		0.002 (0.02)		0.007 (0.02)
Leverage		0.035 (0.03)		0.033 (0.03)		0.026 (0.03)		-0.002 (0.01)		-0.003 (0.01)		-0.009 (0.01)
<i>Panel C: Latin America</i>												
Interactions												
Net Short-Term Exposure x Post	-0.013 (0.04)	-0.002 (0.09)	-0.002 (0.03)	0.011 (0.06)	0.103 (0.05) **	0.201 (0.11) *	-0.004 (0.02)	-0.055 (0.04)	0.015 (0.01)	-0.004 (0.03)	0.009 (0.02)	-0.010 (0.04)
Current Assets x Post		0.059 (0.06)		0.017 (0.05)		0.069 (0.07)		-0.020 (0.03)		-0.014 (0.03)		-0.018 (0.04)
Leverage x Post		0.049 (0.11)		-0.007 (0.05)		-0.119 (0.07)		0.071 (0.03) ***		0.018 (0.02)		0.012 (0.02)
Controls												
Post	0.002 (0.01)	-0.038 (0.05)	-0.034 (0.01) ***	-0.035 (0.02)	-0.020 (0.01) *	0.016 (0.03)	0.009 (0.00) ***	-0.019 (0.01) **	0.001 (0.00)	-0.004 (0.01)	0.001 (0.00)	0.000 (0.01)
Net Short-Term Exposure	0.002 (0.03)	0.029 (0.05)	0.006 (0.02)	0.031 (0.05)	-0.001 (0.02)	0.034 (0.05)	-0.014 (0.01)	-0.001 (0.02)	-0.015 (0.01)	-0.008 (0.02)	-0.015 (0.01)	-0.002 (0.02)
Current Assets		-0.019 (0.04)		-0.016 (0.04)		-0.011 (0.04)		0.010 (0.02)		0.004 (0.02)		0.012 (0.02)
Leverage		-0.071 (0.04) *		-0.068 (0.04) *		-0.079 (0.04) *		-0.012 (0.01)		-0.008 (0.01)		-0.011 (0.01)

Note: Table continues on following page.

Table 7: Sudden Stop Episodes (cont.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Disposal of Fixed Assets						Disposal of Fixed Assets > 0					
Independent Variables:	(t)	(t)	(t+1)	(t+1)	(t+2)	(t+2)	(t)	(t)	(t+1)	(t+1)	(t+2)	(t+2)
<i>Panel D: Full Sample</i>												
Interactions												
Net Short-Term Exposure x Post	0.005 (0.00)	-0.005 (0.01)	0.007 (0.00)	-0.004 (0.01)	0.007 (0.00)	-0.002 (0.01)	-0.027 (0.08)	-0.069 (0.12)	-0.066 (0.08)	-0.046 (0.12)	0.001 (0.08)	0.015 (0.12)
Current Assets x Post		-0.010 (0.01)		-0.009 (0.01)		-0.007 (0.01)		-0.051 (0.11)		0.043 (0.12)		-0.011 (0.11)
Leverage x Post		0.008 (0.01)		0.011 (0.01) **		0.009 (0.01)		0.021 (0.07)		0.014 (0.07)		-0.038 (0.08)
Controls												
Post	0.001 (0.00)	0.000 (0.00)	0.001 (0.00)	-0.002 (0.00)	0.001 (0.00)	-0.002 (0.00)	-0.019 (0.02)	-0.012 (0.04)	-0.042 (0.02) **	-0.066 (0.04)	-0.058 (0.02) ***	-0.033 (0.04)
Net Short-Term Exposure	0.002 (0.00)	0.008 (0.00) *	0.001 (0.00)	0.008 (0.00) *	0.001 (0.00)	0.008 (0.00) *	0.061 (0.06)	0.113 (0.08)	0.064 (0.06)	0.107 (0.09)	0.067 (0.06)	0.087 (0.09)
Current Assets		0.007 (0.00)		0.008 (0.00) *		0.008 (0.00) **		0.101 (0.08)		0.090 (0.08)		0.079 (0.08)
Leverage		-0.003 (0.00)		-0.004 (0.00) *		-0.005 (0.00) **		0.018 (0.05)		0.023 (0.05)		0.055 (0.06)
<i>Panel E: Asia</i>												
Interactions												
Net Short-Term Exposure x Post	0.007 (0.01)	-0.007 (0.01)	0.011 (0.01) **	-0.004 (0.01)	0.009 (0.01) *	0.002 (0.01)	0.004 (0.09)	-0.038 (0.13)	-0.015 (0.08)	-0.034 (0.13)	0.051 (0.09)	0.053 (0.13)
Current Assets x Post		-0.016 (0.01) *		-0.017 (0.01) **		-0.007 (0.01)		-0.059 (0.13)		-0.025 (0.13)		-0.088 (0.13)
Leverage x Post		0.008 (0.01)		0.011 (0.01) **		0.005 (0.01)		0.017 (0.07)		0.010 (0.08)		-0.098 (0.08)
Controls												
Post	0.002 (0.00)	0.004 (0.00)	0.002 (0.00)	0.002 (0.00)	0.001 (0.00)	0.001 (0.00)	0.002 (0.02)	0.016 (0.05)	-0.014 (0.02)	-0.010 (0.05)	-0.026 (0.02)	0.068 (0.05)
Net Short-Term Exposure	0.001 (0.00)	0.007 (0.01)	0.000 (0.00)	0.007 (0.01)	0.000 (0.00)	0.007 (0.01)	0.047 (0.06)	0.129 (0.08)	0.048 (0.06)	0.127 (0.08)	0.064 (0.06)	0.114 (0.09)
Current Assets		0.008 (0.01)		0.008 (0.01)		0.008 (0.01)		0.156 (0.09) *		0.157 (0.09) *		0.152 (0.09) *
Leverage		-0.003 (0.00)		-0.005 (0.00) *		-0.005 (0.00) *		0.019 (0.05)		0.028 (0.05)		0.076 (0.06)
<i>Panel F: Latin America</i>												
Interactions												
Net Short-Term Exposure x Post	-0.002 (0.00)	-0.007 (0.01)	-0.010 (0.01)	-0.007 (0.01)	-0.005 (0.01)	-0.039 (0.02) *	-0.224 (0.17)	-0.362 (0.36)	-0.256 (0.17)	-0.209 (0.36)	-0.249 (0.17)	-0.474 (0.38)
Current Assets x Post		-0.001 (0.01)		0.013 (0.01)		-0.023 (0.02)		-0.179 (0.31)		0.081 (0.30)		-0.140 (0.33)
Leverage x Post		0.009 (0.01)		0.009 (0.01)		0.039 (0.03)		0.051 (0.26)		0.011 (0.26)		0.244 (0.27)
Controls												
Post	-0.001 (0.00)	-0.004 (0.00)	-0.001 (0.00)	-0.009 (0.01)	0.000 (0.00)	-0.012 (0.01)	-0.062 (0.04) *	-0.036 (0.09)	-0.100 (0.04) ***	-0.127 (0.10)	-0.129 (0.04) ***	-0.207 (0.10) **
Net Short-Term Exposure	0.005 (0.00) *	0.011 (0.01) *	0.005 (0.00) *	0.012 (0.01) *	0.004 (0.00)	0.014 (0.01) **	0.190 (0.13)	0.154 (0.27)	0.192 (0.13)	0.156 (0.28)	0.165 (0.13)	0.165 (0.29)
Current Assets		0.008 (0.01)		0.008 (0.01)		0.012 (0.01) **		-0.010 (0.22)		-0.025 (0.23)		0.003 (0.23)
Leverage		-0.003 (0.01)		-0.003 (0.01)		-0.005 (0.01)		0.052 (0.18)		0.036 (0.18)		0.007 (0.18)

Notes:

Each column reports the results of an OLS regression. Period t is the capital reversal episode, as defined in the text. All regressions include observations from two periods: t-1 and either t, t+1 or t+2. The post dummy corresponds to periods t, t+1 or t+2. The dependent variables are as indicated above each column. Estimates of the effect of the independent variables are listed in each row. Huber-White standard errors are reported in parenthesis. A single asterisk denotes statistical significance at the 90% level of confidence; double, 95%; triple, 99%. Net short-term exposure is defined as the difference between current liabilities and current assets. Firm-level independent variables are once-lagged values. All accounting variables are scaled by the lag of total firm assets. The accounting data are from the Worldscope database, as described in the text. Macro data are drawn from various sources. For detailed sources and descriptions, see Section 2.

Table 8: Differential Access to Capital

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent Variables:							
	<u>Capital Expenditures</u>		<u>Disposal of Fixed Assets</u>		<u>Disposal of Fixed Assets > 0</u>		<u>Inventory Investment</u>	
Period for dependent variable:	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)
Independent Variables:	<i>Panel A: Interaction with ADR</i>							
Net Short-Term Exposure x Net Capital Account	-0.051 (0.107)	0.012 (0.163)	0.058 (0.026) **	0.044 (0.026) *	-0.017 (0.388)	0.381 (0.379)	0.009 (0.059)	-0.022 (0.068)
Dummy if firm has ADR x Net Capital Account	-0.038 (0.051)	-0.025 (0.070)	0.004 (0.016)	0.018 (0.019)	-0.287 (0.192)	0.309 (0.184) *	0.042 (0.025) *	0.026 (0.029)
	<i>Panel B: Interaction with Cross Listing</i>							
Net Short-Term Exposure x Net Capital Account	-0.051 (0.106)	0.010 (0.161)	0.058 (0.025) **	0.041 (0.026)	-0.082 (0.387)	0.243 (0.379)	0.001 (0.058)	-0.029 (0.068)
Dummy if firm cross listed x Net Capital Account	-0.071 (0.049)	-0.121 (0.074)	0.007 (0.013)	0.008 (0.014)	-0.087 (0.129)	-0.207 (0.136)	0.030 (0.027)	0.035 (0.029)
	<i>Panel C: Interaction with Listed on Stock Exchange</i>							
Net Short-Term Exposure x Net Capital Account	-0.052 (0.106)	0.006 (0.162)	0.058 (0.025) **	0.042 (0.026)	-0.058 (0.387)	0.264 (0.378)	0.003 (0.058)	-0.029 (0.068)
Dummy if listed on exchange x Net Capital Account	0.052 (0.294)	-0.338 (0.455)	-0.015 (0.018)	-0.023 (0.027)	0.861 (0.569)	1.150 (0.524) **	0.107 (0.113)	0.004 (0.135)
	<i>Panel D: Interaction with Size</i>							
Net Short-Term Exposure x Net Capital Account	-0.115 (0.111)	-0.148 (0.180)	0.074 (0.025) ***	0.051 (0.028) *	-0.089 (0.402)	0.465 (0.384)	-0.012 (0.061)	-0.056 (0.073)
Log Total Assets x Net Capital Account	-0.026 (0.013) **	-0.063 (0.023) ***	0.005 (0.003) *	0.003 (0.004)	0.075 (0.039) *	0.139 (0.037) ***	-0.006 (0.006)	-0.011 (0.008)
	<i>Panel E: Industry-Specific Sensitivities to Capital Flows</i>							
Net Short-Term Exposure x Net Capital Account	-0.003 (0.106)	0.088 (0.170)	0.048 (0.025) *	0.031 (0.027)	-0.159 (0.389)	0.107 (0.385)	0.012 (0.059)	-0.023 (0.069)
Dummies for 1-digit SIC x Net Capital Account	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes:

Each column reports the results of an OLS regression. The dependent variables are as indicated above each column. Estimates of the effect of the independent variables are listed in each row. Also included in each regression are indicator variables for each country-year cell. Huber-White standard errors are given in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence; double, 95%; triple, 99%. The number of observations varies because of data availability. Net short-term exposure is defined as the difference between current liabilities and current assets. Firm-level independent variables are once-lagged values. All accounting variables are scaled by the lag of total firm assets. The macroeconomic variable (net capital account) is from the current period, but normalized by lagged GDP. The accounting data are from the Worldscope database, as described in the text. Macro data are drawn from various sources. For detailed sources and descriptions, see Section 2.

Table 9: Competitiveness Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent Variables:							
	Capital Expenditures		Disposal of Fixed Assets		Disposal of Fixed Assets > 0		Inventory Investment	
Period for dependent variable:	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)
Independent Variables:	<i>Panel A: Controlling for Cash Flow</i>							
Net Short-Term Exposure x Net Capital Account	-0.182 (0.112)	-0.109 (0.221)	0.056 (0.025) **	0.040 (0.028)	-0.330 (0.384)	-0.020 (0.360)	-0.059 (0.058)	-0.084 (0.071)
EBITDA	0.147 (0.006) ***	0.187 (0.012) ***	0.000 (0.001)	0.001 (0.002)	0.088 (0.019) ***	0.110 (0.018) ***	0.071 (0.003) ***	0.047 (0.004) ***
	<i>Panel B: Controls x $\mathbf{D} \log(rer)$</i>							
Net Short-Term Exposure x Net Capital Account	-0.079 (0.114)	-0.014 (0.222)	0.055 (0.026) **	0.041 (0.028)	-0.049 (0.389)	0.133 (0.356)	-0.014 (0.060)	-0.023 (0.073)
	<i>Panel C: SIC x $\mathbf{D} \log(rer)$ interactions</i>							
Net Short-Term Exposure x Net Capital Account	-0.018 (0.111)	0.030 (0.217)	0.056 (0.025) **	0.031 (0.028)	-0.316 (0.380)	0.035 (0.349)	0.000 (0.058)	-0.036 (0.071)
	<i>Panel D: Dummy Export x $\mathbf{D} \log(rer)$ interactions</i>							
Net Short-Term Exposure x Net Capital Account	-0.029 (0.111)	0.019 (0.216)	0.061 (0.025) **	0.040 (0.028)	-0.063 (0.379)	0.264 (0.347)	0.010 (0.058)	-0.038 (0.071)
	<i>Panel E: SIC x $\mathbf{D} \log(rer)$ interactions & Dummy Export x $\mathbf{D} \log(rer)$ interactions</i>							
Net Short-Term Exposure x Net Capital Account	-0.160 (0.113)	-0.071 (0.236)	0.054 (0.027) **	0.035 (0.030)	-0.360 (0.405)	-0.063 (0.378)	-0.030 (0.062)	-0.107 (0.076)
	<i>Panel F: Year x Country x SIC fixed effects</i>							
Net Short-Term Exposure x Net Capital Account	-0.049 (0.112)	0.047 (0.229)	0.052 (0.026) **	0.035 (0.029)	-0.223 (0.399)	0.054 (0.364)	0.024 (0.061)	-0.026 (0.075)

Notes:

Each column reports the results of an OLS regression. The dependent variables are as indicated above each column. Estimates of the effect of the independent variables are listed in each row. Also included in each regression are indicator variables for each country-year cell. Huber-White standard errors are given in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence; double, 95%; triple, 99%. The number of observations varies because of data availability. Net short-term exposure is defined as the difference between current liabilities and current assets. Firm-level independent variables are once-lagged values. All accounting variables are scaled by the lag of total firm assets. The macroeconomic variables (net capital account and log change in the real exchange rate) are from the current period. Net capital account is normalized by lagged GDP. The real exchange rate is the ratio of the local currency price of the US\$ to the domestic CPI. The accounting data are from the Worldscope database, as described in the text. Macro data are drawn from various sources. For detailed sources and descriptions, see Section 2.

Table 10: Financing and Short-Term Exposure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent Variables:								
Independent Variables and Regression Statistics:	Total Debt			Interest Accruals			Net New Debt		
<i>Panel A: Dependent Variables from the Current Year</i>									
Interactions with Capital Flows:									
Net Short-Term Exposure x Net Capital Account	-2.058 (0.303) ***	-0.131 (0.387)	-0.327 (0.417)	-0.133 (0.033) ***	-0.087 (0.057)	-0.152 (0.055) ***	-0.019 (0.072)	-0.147 (0.140)	-0.028 (0.144)
Leverage x Net Capital Account		-0.345 (0.293)	-0.671 (0.293) **		0.072 (0.050)	-0.004 (0.044)		0.203 (0.113) *	0.058 (0.118)
Current Assets x Net Capital Account		0.756 -0.317 **	0.585 (0.336) *		-0.085 (0.048) *	-0.108 (0.045) **		0.027 (0.134)	0.121 (0.139)
Controls:									
Net Short-Term Exposure	0.593 (0.022) ***	0.032 (0.029)	0.018 (0.032)	0.050 (0.002) ***	0.001 (0.004)	-0.006 (0.004) *	-0.011 (0.005) **	-0.003 (0.008)	0.012 (0.009)
Leverage		0.852 (0.024) ***	0.757 (0.032) ***		0.073 (0.003) ***	0.035 (0.004) ***		-0.010 (0.006) *	-0.027 (0.006) ***
Current Assets		0.033 -0.023	0.023 (0.026)		-0.004 (0.003)	-0.006 (0.003) **		-0.002 (0.008)	0.007 (0.008)
Lagged Dependent Variable			0.086 (0.017) ***			0.558 (0.022) ***			0.138 (0.011) ***
Regression Statistics:									
N	19190	19185	15497	18643	18634	14883	15392	15383	12358
R ²	0.34	0.58	0.59	0.38	0.48	0.62	0.15	0.15	0.18
<i>Panel B: Dependent Variables from the Following Year</i>									
Interactions with Capital Flows:									
Net Short-Term Exposure x Net Capital Account	-1.880 (0.405) ***	-1.306 (0.535) **	-2.058 (0.485) ***	-0.072 (0.038) *	-0.017 (0.059)	-0.066 (0.048)	0.145 (0.097)	-0.144 (0.198)	-0.114 (0.193)
Leverage x Net Capital Account		1.133 (0.401) ***	0.381 (0.353)		0.078 (0.047) *	0.012 (0.032)		0.354 (0.162) **	0.341 (0.134) **
Current Assets x Net Capital Account		-0.150 -0.480	-1.251 (0.442) ***		-0.001 (0.050)	-0.026 (0.040)		-0.192 (0.182)	-0.191 (0.183)
Controls:									
Net Short-Term Exposure	0.498 (0.029) ***	0.058 (0.038)	0.065 (0.034) *	0.041 (0.003) ***	0.001 (0.004)	-0.001 (0.003)	-0.012 (0.007)	-0.003 (0.014)	0.006 (0.014)
Leverage		0.738 (0.029) ***	0.301 (0.038) ***		0.066 (0.004) ***	0.025 (0.003) ***		-0.009 (0.012)	-0.017 (0.010) *
Current Assets		0.076 -0.033 **	0.057 (0.030) *		-0.001 (0.004)	0.001 (0.003)		0.006 (0.012)	0.005 (0.013)
Lagged Dependent Variable			0.518 (0.028) ***			0.557 (0.021) ***			0.116 (0.018) ***
Regression Statistics:									
N	15564	15557	12452	15116	15110	11951	12838	12832	10534
R ²	0.20	0.30	0.49	0.33	0.39	0.57	0.12	0.12	0.14

Notes:

Each column reports the results of an OLS regression. The dependent variables are as indicated above each column. Estimates of the effect of the independent variables are listed in each row. Also included in each regression are indicator variables for each country-year cell. Huber-White standard errors are given in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence; double, 95%; triple, 99%. The number of observations varies because of data availability. Net short-term exposure is defined as the difference between current liabilities and current assets. Firm-level independent variables are once-lagged values. All accounting variables are scaled by the lag of total firm assets. The macroeconomic variable (net capital account) is from the current period, but normalized by lagged GDP. The accounting data are from the Worldscope database, as described in the text. Macro data are drawn from various sources. For detailed sources and descriptions, see Section 2.

Table 11: Financing Regressions by Region

Independent Variables:	Samples and Dependent Variables:								
	Total Debt			Interest Accruals			Net New Debt		
	East Asia	Latin America	Other Countries	East Asia	Latin America	Other Countries	East Asia	Latin America	Other Countries
<i>Panel A: Dependent Variables from the Current Year</i>									
Interactions with Capital Flows:									
Net Short-Term Exposure x Net Capital Account	-0.469 (0.489)	-1.039 (1.631)	2.620 (1.494) *	-0.188 (0.060) ***	0.067 (0.323)	-0.535 (0.639)	-0.090 (0.163)	-0.158 (0.629)	0.240 (0.762)
Leverage x Net Capital Account	-0.883 (0.332) ***	-0.007 (0.949)	-3.347 (1.208) ***	-0.001 (0.050)	-0.208 (0.195)	-0.367 (0.285)	0.101 (0.132)	0.469 (0.377)	-0.591 (0.516)
Current Assets x Net Capital Account	0.372 (0.393)	1.665 (1.274)	3.129 (1.298) **	-0.114 (0.047) **	-0.089 (0.276)	-0.467 (0.416)	0.039 (0.158)	0.420 (0.521)	0.378 (0.526)
Controls:									
Net Short-Term Exposure	0.025 (0.042)	-0.019 (0.059)	0.021 (0.055)	-0.006 (0.004)	-0.008 (0.012)	0.000 (0.008)	0.004 (0.011)	0.037 (0.026)	0.037 (0.024)
Leverage	0.700 (0.044) ***	0.898 (0.048) ***	0.765 (0.053) ***	0.036 (0.005) ***	0.059 (0.008) ***	0.017 (0.007) **	-0.022 (0.008) ***	-0.064 (0.014) ***	-0.005 (0.017)
Current Assets	0.020 (0.034)	-0.046 (0.047)	0.070 (0.049)	-0.009 (0.004) ***	0.002 (0.010)	0.001 (0.007)	-0.002 (0.011)	0.026 (0.019)	0.013 (0.018)
Lagged Dependent Variable	0.112 (0.024) ***	0.042 (0.028)	0.041 (0.027)	0.472 (0.030) ***	0.514 (0.035) ***	0.707 (0.045) ***	0.137 (0.013) ***	0.125 (0.027) ***	0.166 (0.035) ***
<i>Panel B: Dependent Variables from the Following Year</i>									
Interactions with Capital Flows:									
Net Short-Term Exposure x Net Capital Account	-2.156 (0.523) ***	-0.520 (1.868)	2.744 (3.057)	-0.058 (0.046)	0.474 (0.362)	0.717 (0.506)	-0.096 (0.204)	-0.162 (0.807)	1.619 (1.274)
Leverage x Net Capital Account	0.324 (0.398)	-0.636 (1.346)	0.550 (2.332)	-0.026 (0.030)	0.023 (0.204)	0.171 (0.297)	0.376 (0.153) **	0.246 (0.561)	0.374 (0.608)
Current Assets x Net Capital Account	-1.230 (0.491) **	1.083 (1.453)	-1.681 (2.663)	-0.036 (0.039)	0.245 (0.303)	0.638 (0.341) *	-0.241 (0.203)	0.460 (0.666)	1.101 (0.659) *
Controls:									
Net Short-Term Exposure	0.060 (0.040)	0.033 (0.075)	0.084 (0.102)	0.002 (0.003)	-0.028 (0.014) **	-0.013 (0.010)	0.011 (0.015)	-0.019 (0.050)	-0.002 (0.036)
Leverage	0.305 (0.043) ***	0.353 (0.100) ***	0.138 (0.113)	0.021 (0.003) ***	0.049 (0.010) ***	0.009 (0.008)	-0.017 (0.011)	-0.017 (0.032)	0.013 (0.024)
Current Assets	0.053 (0.040)	-0.007 (0.060)	0.108 (0.072)	0.000 (0.003)	-0.006 (0.012)	-0.001 (0.007)	0.006 (0.016)	-0.021 (0.039)	-0.004 (0.023)
Lagged Dependent Variable	0.504 (0.033) ***	0.557 (0.050) ***	0.555 (0.079) ***	0.554 (0.029) ***	0.485 (0.035) ***	0.680 (0.044) ***	0.106 (0.020) ***	0.152 (0.050) ***	0.104 (0.049) **

Notes:

Each column reports the results of an OLS regression. The dependent variables are as indicated above each column. Estimates of the effect of the independent variables are listed in each row. Also included in each regression are indicator variables for each country-year cell. Huber-White standard errors are given in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence; double, 95%; triple, 99%. The number of observations varies because of data availability. Net short-term exposure is defined as the difference between current liabilities and current assets. Firm-level independent variables are once-lagged values. All accounting variables are scaled by the lag of total firm assets. The macroeconomic variable (net capital account) is from the current period, but normalized by lagged GDP. The accounting data are from the Worldscope database, as described in the text. Macro data are drawn from various sources. For detailed sources and descriptions, see Section 2.

Appendix A: Data Sources and Definitions

This appendix describes our main variables and sources.

Sources and definitions for the firm level data

Our main source of firm level data is the Worldscope Database. There are two main types of firm level data: accounting variables, and non-accounting variables. The first come directly from firm Balance Sheets, Income Statements and Funds Flows Statements. The second correspond to additional information provided by Worldscope regarding firm ownership, and production structure. Examples of the latter are whether a firm has a listed stock, where this stock is traded, and the sector where the firm is operating. The only firm level variable not from Worldscope is the ADR dummy, which identifies whether the firm trades shares in the form of American Depositary Receipts (ADRs).

Accounting Variables

Investment

- Capital Expenditures: This variable corresponds to the funds spent by the firm on fixed assets (WS 04601). Scaled by lagged total assets (WS 02999).
- Disposal of Fixed Assets: Sales of fixed assets (WS 04351). Scaled by lagged total assets.
- Change in Inventories: This variable corresponds to the change in inventories (WS 02101) between the current and previous year, scaled by lagged assets.

Main control variables

- Exposure: This variable is measured as the difference between lagged current liabilities (WS 03101) and lagged current assets (WS 02201) over lagged assets.
- Leverage: Defined as the ratio of lagged total liabilities (WS 03351) to lagged total assets
- Current Assets: lagged current assets (WS 02201) over lagged total assets.

Financing variables

- Interest Accruals: Interest expenses on debt (WS 01251) over lagged assets.
- Average Interest Rate: This variable is the implicit interest rate paid by the firm. It is calculated as the ratio of interest expenses on debt(WS 01251) over lagged total liabilities (WS 03351).
- Net New Debt: This variable corresponds to new debt issuance, net of debt repayments. It includes both short-term and long-term debt. It is constructed as long-term borrowings (WS 04401) minus the reduction in long-term debt (WS 04701) plus net short term borrowings (WS 04821).

Income variables

- Net Income: This variable correspond to net income after preferred dividends (WS 01706). Scaled by lagged total assets (WS 02999).
- Current Cash Flow: (WS 4201). Scaled by lagged total assets (WS 02999).
- EBITDA: This variable correspond to the earnings before interest expense, income taxes and depreciation (WS 18198). Scaled by lagged total assets (WS 02999).
- Net Sales: This variable correspond to the firm's gross sales and other operating revenue less discounts, returns and allowances (WS 01001). Scaled by lagged total assets (WS 02999).
- Operational Margin: Net Sales (WS 01001) minus Cost of Goods Sold (WS 01051). Scaled by lagged total assets (WS 02999).

Non-Accounting Variables

- ADR: This is a indicator variable that measures wether the firm's stock is listed in a US stock exchange in the form of American Depository Receipts. The variable was constructed using information from the Bank of New York
- Cross-listing: This is a indicator variable that takes on value 1 wether the firm's stock is traded in more than one stock exchange. It was constructed using (WS 20009)
- Listed on a stock exchange: This is a indicator variable that take the value 1 wether the firm has a stock listed in a stock exchange (WS 20009).
- SIC code: Standard Industrial Classification code (version 1987) (WS 07021)
- Export dummy: dummy if firm exported (W 07161) in previous period.

Sources and Definitions for the Macroeconomic Data

All the aggregate variables are based on data from the International Financial Statistics, (IMF) with the exception of the Sudden Stop Dummy which comes from Calvo et al (2004).

Capital Flows

- Net Capital Inflows: Net financial account (IFS 78bjd) expressed in previous period local currency, scaled by lagged nominal GDP (IFS 99b). For previous period local currency US Dollar Balance of Payments variables are multiplied by the once lagged period average exchange rate (local currency \times US Dollar).
- Capital Inflows net of FDI: This variable corresponds to Net Financial Account (IFS 78bjd) net of Direct Investment Abroad (IFS 78bdd) and Direct Investment in Reporting Economy (IFS 78bed), expressed in previous period local currency, scaled by lagged nominal GDP.
- Change in Credit to the Private Sector: This variable corresponds to the cpi-adjusted change in bank credit to private sector (IFS 22d) scaled by nominal GDP.

Alternative Capital Flows Measures

- Low Capital Inflow (*low*): This is a indicator variable that takes a value of 1 when the Net Financial Account (IFS 78bjd) is below a threshold z , where z is defined as the median value of the Net Financial Account in the period between 1985 and 2002 per country.
- Crisis Inflow (*crisis*) : This is a indicator variable that takes a value of 1 when the Net Financial Account (IFS 78bjd) is below a threshold x , where x is the mean value minus one standard deviation of the Net Financial Account over the period 1985 to 2002 for each country.
- Stop in Capital Inflows (*stop*): This is a indicator variable that takes on a value of 1 for negative changes in Net Capital Inflows.
- Sudden Stop: From Calvo et al (2004). The authors define a Sudden Stop as a phase that meets the following conditions:
 1. It contains at least one observation where the year-on-year fall in capital flows lies at least two standard deviations below its sample mean.
 2. The Sudden Stop phase ends once the annual change in capital flows exceeds one standard deviation below its sample mean.
 3. Moreover, for the sake of symmetry, the start of a Sudden Stop phase is determined by the first time the annual change in capital flows falls one standard deviation below the mean.
 4. The episode must lead to a costly disruption in economic activity, defined as a contraction in output.

Appendix B: Robustness to Sample Changes

Period for dependent variable:	Dependent Variables:							
	Capital Expenditures		Disposal of Fixed Assets		Disposal of Fixed Assets > 0		Inventory Investment	
	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)	(t)	(t+1)
Independent Variables:								
<i>Baseline Sample: Outliers z-score>6, synthetic firms, imputed values for bankrupt firms</i>								
Net Short-Term Exposure x Net Capital Account	0.015 (0.093)	0.075 (0.134)	0.052 (0.026) **	0.004 (0.026)	-0.062 (0.346)	0.282 (0.326)	0.036 (0.064)	-0.039 (0.072)
Number of Observations	13943	11362	11613	9864	20023	20023	14238	11598
<i>Sample 2: Outliers z-score>6, synthetic firms, no imputed values for bankrupt firms</i>								
Net Short-Term Exposure x Net Capital Account	0.015 (0.093)	0.075 (0.134)	0.050 (0.026) *	0.004 (0.026)	-0.051 (0.346)	0.293 (0.326)	0.036 (0.064)	-0.039 (0.072)
Number of Observations	13938	11362	11609	9864	20016	20016	14233	11598
<i>Sample 3: Outliers z-score>6, no synthetic firms, imputed values for bankrupt firms</i>								
Net Short-Term Exposure x Net Capital Account	0.018 (0.093)	0.078 (0.134)	0.056 (0.026) **	0.008 (0.026)	0.057 (0.345)	0.432 (0.326)	0.047 (0.063)	-0.042 (0.072)
Number of Observations	14322	11666	11821	10041	20523	20523	14645	11922
<i>Sample 4: Outliers z-score>6, no synthetic firms, no imputed values for bankrupt firms</i>								
Net Short-Term Exposure x Net Capital Account	0.018 (0.093)	0.078 (0.134)	0.054 (0.026) **	0.008 (0.026)	0.068 (0.345)	0.442 (0.325)	0.047 (0.063)	-0.042 (0.072)
Number of Observations	14317	11666	11817	10041	20516	20516	14640	11922
<i>Sample 5: Outliers top and bottom 1%, synthetic firms, imputed values for bankrupt firms</i>								
Net Short-Term Exposure x Net Capital Account	-0.031 (0.072)	-0.032 (0.084)	0.055 (0.022) **	0.004 (0.024)	-0.094 (0.388)	0.301 (0.360)	0.029 (0.053)	0.045 (0.057)
Number of Observations	13423	10964	11294	9599	19511	19511	13642	11072
<i>Sample 6: Outliers top and bottom 1%, synthetic firms, no imputed values for bankrupt firms</i>								
Net Short-Term Exposure x Net Capital Account	-0.030 (0.072)	-0.032 (0.084)	0.054 (0.022) **	0.004 (0.024)	-0.082 (0.388)	0.313 (0.360)	0.027 (0.053)	0.045 (0.057)
Number of Observations	13418	10964	11291	9599	19504	19504	13639	11072
<i>Sample 7: Outliers top and bottom 1%, no synthetic firms, imputed values for bankrupt firms</i>								
Net Short-Term Exposure x Net Capital Account	-0.025 (0.072)	-0.034 (0.084)	0.056 (0.022) **	0.008 (0.024)	0.008 (0.386)	0.464 (0.359)	0.038 (0.053)	0.037 (0.057)
Number of Observations	13787	11261	11490	9764	19994	19994	14031	11386
<i>Sample 8: Outliers top and bottom 1%, no synthetic firms, no imputed values for bankrupt firms</i>								
Net Short-Term Exposure x Net Capital Account	-0.024 (0.072)	-0.034 (0.084)	0.056 (0.022) **	0.008 (0.024)	0.021 (0.386)	0.476 (0.359)	0.036 (0.053)	0.037 (0.057)
Number of Observations	13782	11261	11487	9764	19987	19987	14028	11386

Notes:

Each panel presents the results using a different sample. Each cell reports the results of an OLS regression. The dependent variables are as indicated above each column. Estimates of the effect of the indicated short-term exposure variable times the capital inflow variable are listed in each cell. Independent variables in each regression are as in Table 3, Column 2, however reporting of the rest of the estimates is suppressed. A single asterisk denotes statistical significance at the 90% level of confidence; double, 95%; triple, 99%. Net capital account is from the current period, but normalized by lagged GDP. The accounting data are from the Worldscope database, as described in the text. Macro data are drawn from various sources. For detailed sources and descriptions, see Section 2.